

STIC-Biotech/ChemLib

121 752

From: Chan, Christina
Sent: Tuesday, May 11, 2004 11:21 AM
To: Basi, Nirmal; STIC-Biotech/ChemLib
Subject: RE: Rush for App. #: 10/032,108

Please rush. Thanks Chris

Chris Chan

TC 1600 New Hire Training Coordinator and SPE 1644 & 1642
(571)-272-0841
Remsen, 3E89

-----Original Message-----

From: Basi, Nirmal
Sent: Tuesday, May 11, 2004 11:19 AM
To: Chan, Christina
Subject: Rush for App. #: 10/032,108

Christina I am seeking approval for a RUSH sequence search, as indicated below. If approved, could you please forward the search to STIC and cc a copy to me.

Christina I am seeking approval for a RUSH sequence search, as indicated below. If approved, could you please forward the search to STIC and cc a copy to me.

Examiner: Nirmal S. Basi
Art Unit 1646
Office: Remsen Building, Room 4D68
Mail Room: Remsen Building, room 4C70

Sequence search:

App. #: 10/032,108
Result format: Paper.

Title: G-CSF ANALOG COMPOSITIONS AND METHODS
Inventors: OSSLUND, TIMOTHY DAVID

Priority Date: 01/28/93

Please search:

i) SEQ ID NO:2

ii) If possible please also search SEQ ID NO:2 where in the lysine at position 17, 35 and 41 is substituted with arginine.

Search commercial, issued and interference database.

Searcher: _____
Phone: _____
Location: _____
Date Picked Up: _____
Date Completed: _____
Searcher Prep/Review: _____
Clerical: _____
Online time: _____

TYPE OF SEARCH:
NA Sequences: _____
AA Sequences: _____
Structures: _____
Bibliographic: _____
Litigation: _____
Full text: _____
Patent Family: _____
Other: _____

VENDOR/COST (where applic.)
STN: _____
DIALOG: _____
Questel/Orbit: _____
DRLink: _____
Lexis/Nexis: _____
Sequence Sys.: _____
WWW/Internet: _____
Other (specify): _____

Thanks,
Nirmal S. Basi

Searcher: _____
Phone: _____
Location: _____
Date Picked Up: _____
Date Completed: _____
Searcher Prep/Review: _____
Clerical: _____
Online time: _____

TYPE OF SEARCH:
NA Sequences: _____
AA Sequences: _____
Structures: _____
Bibliographic: _____
Litigation: _____
Full text: _____
Patent Family: _____
Other: _____

VENDOR/COST (where applic.)
STN: _____
DIALOG: _____
Questel/Orbit: _____
DRLink: _____
Lexis/Nexis: _____
Sequence Sys.: _____
WWW/Internet: _____
Other (specify): _____

FILE 'MEDLINE'
FILE 'JAPIO'
FILE 'BIOSIS'
FILE 'SCISEARCH'
FILE 'WPIDS'
FILE 'CAPLUS'
FILE 'EMBASE'.

=> S GRANULOCYTE COLONY STIMULATING FACTOR OR
GCSF OR G-CSF
L1 64738 GRANULOCYTE COLONY STIMULATING
FACTOR OR GCSF OR G-CSF

=> S L1 AND LYSINE# AND ARGININE#
L2 37 L1 AND LYSINE# AND ARGININE#

=> S L2 NAD POLY ETHYLENE GLYCOL#
MISSING OPERATOR L2 NAD
The search profile that was entered contains
terms or
nested terms that are not separated by a
logical operator.

=> S L2 AND POLYETHYLENE GLYCOL#
L3 5 L2 AND POLYETHYLENE GLYCOL#

=> S L1 AND ANALOG#
L4 1237 L1 AND ANALOG#

=> S L4 AND LYSINE#
L5 13 L4 AND LYSINE#

=> S L4 AND ARGININE#
L6 20 L4 AND ARGININE#

=> DUP REM L2
PROCESSING COMPLETED FOR L2
L7 30 DUP REM L2 (7 DUPLICATES
REMOVED)

=> DUP REM L5
PROCESSING COMPLETED FOR L5
L8 12 DUP REM L5 (1 DUPLICATE
REMOVED)

=> DUP REM L6
PROCESSING COMPLETED FOR L6
L9 19 DUP REM L6 (1 DUPLICATE
REMOVED)

=> D IBIB ABS L7 1-30

L7 ANSWER 1 OF 30 CAPLUS COPYRIGHT 2004
ACS on STN
ACCESSION NUMBER: 2004:270081 CAPLUS
DOCUMENT NUMBER: 140:298619
TITLE: Improved recombinant
adeno-assocd. virus (rAAV)
expression systems
for genetic modification of
specific capsid
proteins and therapeutic
applications
INVENTOR(S): Warrington, Kenneth
H.; Opie, Shaun R.; Muzyczka,
Nicholas
PATENT ASSIGNEE(S): University of Florida
Research Foundation, Inc., USA
SOURCE: PCT Int. Appl., 180
pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO. KIND DATE
APPLICATION NO. DATE

WO 2004027019 A2 20040401 WO
2003-US13583 20030501
W: AE, AG, AL, AM, AT, AU, AZ, BA,
BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ,
EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP,
KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK,
MN, MW, MX, MZ, NO, NZ, OM, PH,
PL, PT, RO, RU, SC, SD, SE, SG,
SK, SL, TJ, TM, TN, TR, TT, TZ,
UA, UG, US, UZ, VC, VN, YU, ZA,
ZM, ZW, AM, AZ, BY, KG, KZ, MD,
RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL,
SZ, TZ, UG, ZM, ZW, AT, BE, BG,
CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC,
NL, PT, RO, SE, SI, SK, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG
PRIORITY APPLN. INFO.: US
2002-377315P P 20020501
AB Disclosed are improved recombinant adeno-
assocd. viral (rAAV) vectors
having mutations in one or more capsid
proteins. Exemplary vectors are
provided that have altered affinity for
heparin/heparin sulfate, as well
as vectors, expression systems, and rAAV
virions that lack functional VP2
protein expression, but are nevertheless,
fully virulent. Also provided
by the invention are rAAV vector-based
compsns., virus particles, host
cells, and pharmaceutical formulations
that comprise them useful in the
expression of selected therapeutic
proteins, polypeptides, peptides,
antisense oligonucleotides and/or
ribozymes in selected mammals, including
organs, tissues, and human host cells.
Different rAAV2 capsid mutant
plasmids, such as pIM45-VP1,3, pIM45-
VP1,2 and pIM45-VP2,3 were provided.

L7 ANSWER 2 OF 30 WPIDS COPYRIGHT 2004
THOMSON DERWENT on STN DUPLICATE 1
ACCESSION NUMBER: 2003-239422 [23] WPIDS
DOC. NO. CPI: C2003-061519
TITLE: New fusion protein
having a protein of interest and a
fusion partner that
comprises an amino acid sequence at
its C-terminus that can
be cleaved by ubiquitin cleavage
enzyme, useful for
separating protein of interest from
fusion protein.
DERWENT CLASS: B04 D16

INVENTOR(S): CHO, T H; KIM, J M; LEE, U J; PARK, H B; PARK, Y S; CHO, T; KIM, J; LEE, W; PARK, H; PARK, Y
PATENT ASSIGNEE(S): (ADPR-N) ADVANCED PROTEIN TECHNOLOGIES INC; (SAMY-N) SAMYANG GENEX CORP
COUNTRY COUNT: 101
PATENT INFORMATION:

	PATENT NO	KIND	DATE	WEEK
LA	PG			

43	WO 2003010204	A1	20030206	(200323)* EN
	RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SK SL SZ TR TZ UG ZM ZW			
	W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW			
	KR 2003010536	A	20030205	(200338)
	EP 1417237	A1	20040512	(200431) EN
	R: AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI SK TR			

APPLICATION DETAILS:

	PATENT NO	KIND	DATE
APPLICATION			

	WO 2003010204	A1	WO
2002-KR1416	20020726		
KR 2003010536	A	KR	
2002-43968	20020725		
EP 1417237	A1	EP	
2002-753269	20020726		
		WO	
2002-KR1416	20020726		

FILING DETAILS:

	PATENT NO	KIND
PATENT NO		

	EP 1417237	A1 Based on
2003010204		WO

PRIORITY APPLN. INFO: KR 2002-43968
20020725; KR

2001-45229

20010726

AN 2003-239422 [23] WPIDS

AB WO2003010204 A UPAB: 20030407

NOVELTY - A fusion protein comprising a protein of interest and a fusion

partner that comprises an amino acid

sequence at its C-terminus, which can

be cleaved by ubiquitin cleavage enzyme, and has a difference in

isoelectric point of 1 or more from the protein of interest, is new.

DETAILED DESCRIPTION - An INDEPENDENT CLAIM is included for a process for separating a protein of interest from a fusion protein by expressing the fusion protein in a host cell, loading the fusion protein on matrix, which the fusion partner can adsorb, treating the adsorbed matrix with ubiquitin cleavage enzyme, and eluting the cleaved protein of interest from the matrix. Alternatively, this method comprises expressing the fusion protein in a host cell, loading the fusion protein on matrix, which the fusion partner can adsorb, recovering the fusion protein from the matrix, treating the recovered fusion protein with ubiquitin cleavage enzyme, and separating the protein of interest from the fusion partner by using the adsorption difference on the matrix.

USE - The method and fusion protein are useful for separating a protein of interest from a fusion protein (claimed).

ADVANTAGE - The invention provides a process for conveniently and efficiently separating a protein of interest in high yield.

Dwg.0/9

L7 ANSWER 3 OF 30 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN DUPLICATE 2
ACCESSION NUMBER: 2003-576375 [54] WPIDS
DOC. NO. CPI: C2003-155601
TITLE: Novel solid lipophilic microparticle useful for in vivo delivery of drug, comprises lipophilic substance, hyaluronic acid or its inorganic salt, and an active ingredient e.g. protein or peptide drug.

DERWENT CLASS: A96 B04 B07
INVENTOR(S): KIM, J; KIM, M; KIM, S; KWON, K
PATENT ASSIGNEE(S): (KIMJ-I) KIM J; (KIMM-I) KIM M; (KIMS-I) KIM S; (KWON-I) KWON K
COUNTRY COUNT: 1
PATENT INFORMATION:

	PATENT NO	KIND	DATE	WEEK
LA	PG			

13	US 2003064105	A1	20030403	(200354)*

APPLICATION DETAILS:

	PATENT NO	KIND
APPLICATION		

	US 2003064105	A1 CIP of
2000-648196		20000825
		US

2002-160784 20020603

PRIORITY APPLN. INFO: US 2002-160784
20020603; US

2000-648196

20000825

AN 2003-576375 [54] WPIDS

AB US2003064105 A UPAB: 20030821

NOVELTY - Solid lipophilic microparticle (I) comprises a lipophilic substance, hyaluronic acid or its inorganic salt, and an active ingredient chosen from a protein drug and a peptide drug, where the active ingredient is coated with hyaluronic acid or an inorganic salt of it at first to form a solid microparticle, and then, the surface of the solid microparticle is coated with the lipophilic substance.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a dispersion formulation (II) prepared by dispersing (I) in a lipophilic medium;

(2) an oil-in- water emulsion formulation (III) comprising an aqueous injection medium and (II); and

(3) an aerosol formulation comprising (I).

USE - (I) is useful for in vivo delivering of active ingredients such as protein or peptide drug.

ADVANTAGE - (I) has an improved stability and effective delivery of a drug.

Dwg.1/3

L7 ANSWER 4 OF 30 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

ACCESSION NUMBER: 2003-421352 [39] WPIDS

DOC. NO. CPI: C2003-110999

TITLE: Preparation of spray-dried, drug-containing particles useful for pulmonary delivery of drug and for treating disease involves modulating the charge density of the particles.

DERWENT CLASS: B04 B07 D16

INVENTOR(S): LEHRMAN, S R; STEVENSON, C; YANG, B

PATENT ASSIGNEE(S): (INHA-N) INHALE THERAPEUTIC SYSTEMS INC

COUNTRY COUNT: 101

PATENT INFORMATION:

LA	PATENT NO	KIND	DATE	WEEK
PG				
22	WO 2003035028	A1	20030501	(200339)* EN
	RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SK SL SZ TR TZ UG ZM ZW			
	W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK			

DM DZ EC EE ES FI GB GD GE GH GM

HR HU ID IL IN IS JP KE KG KP KR

KZ LC LK LR LS LT LU LV MA MD MG

MK MN MW MX MZ NO NZ OM PH PL PT

RO RU SD SE SG SI SK SL TJ TM TN

TR TT TZ UA UG US UZ VC VN YU ZA

ZM ZW

APPLICATION DETAILS:

PATENT NO	KIND	DATE
WO 2003035028	A1	
2002-US33016		20021016

WO

PRIORITY APPLN. INFO: US 2001-330073P
20011019

AN 2003-421352 [39] WPIDS

AB WO2003035028 A UPAB: 20030619

NOVELTY - Preparation (M) of spray-dried, drug containing particles comprising combining an aqueous solution with a drug and an optional excipient, and spray drying the solution to form the spray-dried, drug-containing particles, is new.

DETAILED DESCRIPTION - In M, the aqueous solution has a pH that is different from the effective pI of the combination of the drug and the excipient. The net charge is associated with the drug and optional excipient as a result of an absolute difference between the pH and the pI.

ACTIVITY - None given.

MECHANISM OF ACTION - None given.

USE - M is useful for producing

spray-dried, drug-containing particles; in the treatment of disease (claimed) useful for pulmonary delivery of drug.

ADVANTAGE - The formulation is stable and the dispersibility of the formulation can be maintained over 12-weeks; exhibits a drop in emitted dose of not more than 25% over 12-weeks; has moisture content of 6 wt.%.

The mass median aerodynamic diameter (MMAD) of the spray-dried drug-containing particles is 0.1 - 5 mu m. The bulk density of the formulation is 0.1 - 2 g/cm3. The method improves, maintains and optimizes the dispersibility of the particles. The formulation shows improvement in aerosol properties, thus reducing costly drug losses to the inhalation device; reducing the amount administered due to high aerosolization efficiency, and reducing the number of inhalations per day by increasing the amount of aerosolized drug that reaches the lungs of the patient.

Dwg.0/0

L7 ANSWER 5 OF 30 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2003:717744 CAPLUS

DOCUMENT NUMBER: 139:208231
TITLE: Cysteine derivatives
of GM-CSF and related proteins,
and therapeutic uses
thereof
INVENTOR(S): Cox, George N.;
Doherty, Daniel H.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl.
Publ., 56 pp., Cont.-in-part of U. S.
Ser. No. 462,941.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	
APPLICATION NO.	DATE		
US 2003171284	A1	20030911	US
2002-298148	20021115		
WO 9903887	A1	19990128	WO
1998-US14497	19980713		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
US 6608183	B1	20030819	US
2000-462941	20000114		
PRIORITY APPLN. INFO.:			US
1997-52516P	P	19970714	WO
1998-US14497	W	19980713	US
2000-462941	A2	20000114	US
2001-332285P	P	20011115	US
2002-418040P	P	20021011	
AB The growth hormone supergene family comprises greater than 20 structurally related cytokines and growth factors. A general method is provided for creating site-specific, biol. active conjugates of these proteins. The method involves adding cysteine residues to non-essential regions of the proteins or substituting cysteine residues for non-essential amino acids in the proteins using site-directed mutagenesis and then covalently coupling a cysteine-reactive polymer or other type of cysteine-reactive moiety to the proteins via the added cysteine residue. Disclosed herein are preferred sites for adding cysteine residues or introducing cysteine			

substitutions into the proteins, and the proteins and protein derivs. produced thereby. Also disclosed are therapeutic methods for using the cysteine variants of the invention.

L7 ANSWER 6 OF 30 WPIDS COPYRIGHT 2004
THOMSON DERWENT on STN
ACCESSION NUMBER: 2002-590578 [63] WPIDS
DOC. NO. NON-CPI: N2002-468664
DOC. NO. CPI: C2002-167041
TITLE: Dispensing a therapeutic agent in situ to a localized region e.g. a tumor
useful for gene therapy comprises administering a polymer composition, a cross-linking composition and the therapeutic agent to the region.
DERWENT CLASS: A96 B04 B05 D16 P31
INVENTOR(S): AZHDARINIA, A; KIM, E E; LEE, T L; YANG, D J; YU, D
PATENT ASSIGNEE(S): (TEXA) UNIV TEXAS SYSTEM
COUNTRY COUNT: 99
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK
LA	PG		
WO 2002049501	A2	20020627	(200263)* EN
116			
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZM			
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZM ZW			
AU 2002031041 A 20020701 (200264)			
EP 1355566 A2 20031029 (200379) EN			
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR			

APPLICATION DETAILS:

PATENT NO	KIND	APPLICATION	DATE
WO 2002049501	A2		WO
2001-US49087	20011218		
AU 2002031041	A		AU
2002-31041	20011218		
EP 1355566	A2		EP
2001-991306	20011218		WO
2001-US49087	20011218		

FILING DETAILS:

PATENT NO	KIND
PATENT NO	

AU 2002031041 A Based on WO
2002049501
EP 1355566 A2 Based on WO
2002049501

PRIORITY APPLN. INFO: US 2000-256514P
20001218

AN 2002-590578 [63] WPIDS
AB WO 200249501 A UPAB: 20021031
NOVELTY - Dispensing (M1) a therapeutic agent in situ to a localized region in an individual comprising administering a biocompatible polymer composition (a), a cross-linking composition (b) and the therapeutic agent to the region to allow formation of a cross-linked polymer in situ at the region, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

(1) treating a tumor in situ, occluding an artery associated with a tumor in an individual or providing a slow-release hydrogel composition in situ to a tumor involving administering to the tumor (a), (b) and the therapeutic agent; and

(2) a kit for treating a tumor in situ and for occluding an artery associated with a tumor in an individual comprising, a first container with (a) and a second container with (b) in a container.

ACTIVITY - Cytostatic; Antitumor.

Rats with mammary tumor were used in the study. Cisplatin was

suspended in sodium alginate to prepare SA-CDDP (5.4 mg cisplatin/ml). The

SA-CDDP (0.1 ml, cisplatin dose was 3 mg/kg body weight) was injected

directly into the tumors. Calcium chloride (8% in water) was then injected into the same place to form cisplatin-loaded alginate beads in the tumors.

The tumor size was measured to determine the anticancer effect and blood chemical assay (blood urea nitrogen (BUN) and serum creatinine) were

performed to detect renal toxicity. After injection, tumor volume

decreased as a function of time. No tumor relapse had occurred in the rats

5 months after treatment. BUN and serum creatinine levels after

intratumoral injection of SA-CDDP was in the normal range. On day 40, BUN

in five experimental rats and five healthy rats (control) were 18.30 plus

or minus 1.51 mg/dl and 17.88 plus or minus 2.24 mg/dl respectively. Serum

creatinine levels were the same as in both experimental and control rats

(0.6 mg/dl). In rats treated with CDDP intratumorally, a clear

nephrotoxicity was observed as evidenced by increased BUN and creatinine levels.

MECHANISM OF ACTION - None given.

USE - (M1) is used for dispensing a therapeutic agent in situ to a

localized region in an individual, for treating a tumor in situ, for occluding an artery associated with a tumor and for providing a slow-release hydrogel composition in situ to a tumor (claimed), gene therapy, brachytherapy, transcatheter arterial chemoembolization and/or intralesional injection.

ADVANTAGE - (M1) administers in situ an anticancer drug with high loading yields for a drug carrier, absence of leakage into surrounding tissues, lower cost, ease of process and better treatment response. (M1) allows correct dosing, is relatively easy to perform, is cost-effective and generates little waste of expensive chemotherapeutics. (M1) is also useful for tumors where removal by surgery is not a viable option (claimed).
Dwg.0/9

L7 ANSWER 7 OF 30 WPIDS COPYRIGHT 2004
THOMSON DERWENT on STN

ACCESSION NUMBER: 2002-415697 [44] WPIDS

CROSS REFERENCE: 2002-404689 [43]; 2002-425749 [45]; 2002-527345 [56]

DOC. NO. CPI: C2002-117304

TITLE: New synthetic protein, useful for inducing erythropoiesis

or apoptosis or reducing inflammation, comprising

pseudoamino acid residue with a ribosomally-specified

amino acid sidechain attached to thiol.

DERWENT CLASS: B04

INVENTOR(S): BOTTI, P; BRADBURNE, J

A; CHEN, S; CRESSMAN, S; HUNTER, C

L; KENT, S B H;

KOCHENDOERFER, G; LOW, D W;

KOCHENDOERFER, G G;

WILKEN, J G

PATENT ASSIGNEE(S): (GRYP-N) GRYPHON SCI;

(GRYP-N) GRYPHON THERAPEUTICS INC;

(BOTT-I) BOTTI P; (BRAD-

I) BRADBURNE J A; (CHEN-I) CHEN

S; (CRES-I) CRESSMAN S;

(HUNT-I) HUNTER C L; (KENT-I)

KENT S B H; (KOCH-I)

KOCHENDOERFER G G; (LOWD-I) LOW D W

COUNTRY COUNT: 84

PATENT INFORMATION:

	PATENT NO	KIND	DATE	WEEK
LA	PG			

WO 2002020034 A1 20020314 (200244)* EN
110

RW: AT BE CH CY DE DK EA ES FI FR GB
GH GM GR IE IT KE LS LU MC MW MZ

NL OA PT SD SE SL SZ TR TZ UG ZW

W: AL AM AT AU AZ BA BB BG BR BY CA

CH CN CU CZ DE DK EE ES FI GB GE

GH HU IL IS JP KE KG KP KR KZ LC

LK LR LS LT LU LV MD MG MK MN MW

MX NO NZ PL PT RO RU SD SE SG SI

SK SL TJ TM TR TT UA UG US UZ VN

YU ZW
 AU 2001073388 A 20020322 (200251)
 EP 1315513 A2 20030604 (200337) EN
 R: AL AT BE CH CY DE DK ES FI FR GB
 GR IE IT LI LT LU LV MC MK NL PT
 RO SE SI TR
 NO 2003001047 A 20030508 (200343)
 NO 2003001048 A 20030508 (200343)
 NO 2003001049 A 20030508 (200343)
 KR 2003046411 A 20030612 (200370)
 US 2003208046 A1 20031106 (200374)
 KR 2003057529 A 20030704 (200377)
 KR 2003061784 A 20030722 (200381)
 CN 1457257 A 20031119 (200412)
 ZA 2003000315 A 20040331 (200426)

114

APPLICATION DETAILS:

PATENT NO APPLICATION	KIND DATE	
WO 2002020034	A1	WO
2001-US21935	20010712	
AU 2001073388	A	AU
2001-73388	20010712	
EP 1315513	A2	EP
2001-952657	20010712	
2001-US21935	20010712	WO
NO 2003001047	A	WO
2001-US21930	20010712	NO
2003-1047	20030306	
NO 2003001048	A	WO
2001-US21935	20010712	NO
2003-1048	20030306	
NO 2003001049	A	WO
2001-US21928	20010712	NO
2003-1049	20030306	
KR 2003046411	A	KR
2003-702085	20030213	
US 2003208046	A1	WO
2001-US21935	20010712	US
2003-332386	20030108	
KR 2003057529	A	KR
2003-702774	20030226	
KR 2003061784	A	KR
2003-702773	20030226	
CN 1457257	A	CN
2001-815290	20010712	
ZA 2003000315	A	ZA
2003-315	20030113	

FILING DETAILS:

PATENT NO PATENT NO	KIND	
AU 2001073388	A Based on	WO
2002020034		
EP 1315513	A2 Based on	WO
2002020034		

PRIORITY APPLN. INFO: US 2000-236377P
 20000929; US

2000-231339P
 20000908; US
 2003-332386
 20030108
 AN 2002-415697 [44] WPIDS
 CR 2002-404689 [43]; 2002-425749 [45]; 2002-527345 [56]
 AB WO 200220034 A UPAB: 20040421
 NOVELTY - Synthetic protein (I) containing a pseudo-amino acid (paa) residue in which the sidechain residue is -SRa, where Ra is an optionally substituted terminal portion (or its analog) of a ribosomally-specified amino acid (raa) side chain.
 DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:
 (1) Treatment of human diseases by administering at least one (I), of monomer molecular weight over 25 kD, that mimics the biological activity of a ribosomally specified, bioactive human protein receptor (or fragment), protein receptor ligand (or fragment), or a cytokine;
 (2) A method, designated 'pseudo-native chemical ligation', for synthesizing a polypeptide of formula (Ia); and
 (3) A polypeptide of formula (Ia).
 Q and W = one or more additional amino acids (aa);
 aaN and aaC = N- and C-terminal aa; and
 aax and aay = internal aa with sidechains x and y.
 ACTIVITY - Erythropoietic; Antiinflammatory; Angiogenic; Cytostatic.
 A modified form of human erythropoietin (EPO) containing S-carboxymethylated Cys at position 89 had in vitro ED50 in human UT-7 (megakaryocytic leukemia) cells of 1570 pM; compare 32.5 pM for recombinant human EPO.
 MECHANISM OF ACTION - None given.
 USE - (I), which have the activity of protein receptors, or their ligands, or of cytokines, are useful in human medicine, e.g. for inducing erythropoiesis; inducing or reducing inflammation; initiating angiogenesis or vascularization; inducing apoptosis and modulating the cell cycle.
 ADVANTAGE - (I) can be produced by a chemical ligation method that:
 (1) is applicable to a wide variety of amino acid residues, (poly)peptides and other polymers;
 (2) uses an easily removed thiol-containing auxiliary; and
 (3) connects molecules through a native amide bond. Selected polymers can be attached at user-defined positions through selected types of bonds.
 Selected polymers can be attached at user-defined positions through selected types of bonds. Compared with native proteins, (I) may be more stable or have different specificities for substrates, inhibitors,

receptors, ligands etc.
Dwg.0/7

L7 ANSWER 8 OF 30 WPIDS COPYRIGHT 2004
THOMSON DERWENT on STN
ACCESSION NUMBER: 2002-303913 [34] WPIDS
DOC. NO. CPI: C2002-088338
TITLE: New active branched
biocompatible polymers comprise long
length of polymer linker
with functional group to
conjugate with
biologically active proteins or peptides.
DERWENT CLASS: A96 B04 D16
INVENTOR(S): CHO, S H; LEE, K C;
PARK, M O; CHO, S
PATENT ASSIGNEE(S): (LEEK-I) LEE K; (PARK-I)
PARK M; (LEEK-I) LEE K C;
(PARK-I) PARK M O
COUNTRY COUNT: 96
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK
LA PG			
WO 2002009766	A1	20020207	(200234)* EN
47			
RW: AT BE CH CY DE DK EA ES FI FR GB			
GH GM GR IE IT KE LS LU MC MW MZ			
NL OA PT SD SE SL SZ TR TZ UG ZW			
W: AE AG AL AM AT AU AZ BA BB BG BR			
BY BZ CA CH CN CO CR CU CZ DE DK			
DM DZ EC EE ES FI GB GD GE GH GM			
HR HU ID IL IN IS JP KE KG KP KZ			
LC LK LR LS LT LU LV MA MD MG MK			
MN MW MX MZ NO NZ PL PT RO RU SD			
SE SG SI SK SL TJ TM TR TT TZ UA			
UG US UZ VN YU ZA ZW			
AU 2002024597	A	20020213	(200238)
KR 2002010363	A	20020204	(200254)
KR 396983	B	20030902	(200412)

APPLICATION DETAILS:

PATENT NO	KIND	DATE
WO 2002009766	A1	
2001-KR1209	20010713	
AU 2002024597	A	
2002-24597	20010713	
KR 2002010363	A	
2000-44046	20000729	
KR 396983	B	
2000-44046	20000729	

FILING DETAILS:

PATENT NO	KIND	DATE
AU 2002024597	A Based on	WO
2002009766		
KR 396983	B Previous Publ.	KR
2002010363		
PRIORITY APPLN. INFO: KR 2000-44046		
20000729		

AN 2002-303913 [34] WPIDS
AB WO 200209766 A UPAB: 20040218
NOVELTY - Active branched biocompatible
polymer derivatives (I) comprising
a long length of polymer linker with
functional group to conjugate with
biologically active proteins or peptides,
are new.

DETAILED DESCRIPTION - An
INDEPENDENT CLAIM is included for
protein-polymer or peptide-polymer
conjugates produced by reaction of (I)
with biologically active protein or
peptide.

ACTIVITY - None given in the source
material.

MECHANISM OF ACTION - None given in
the source material.

USE - Used for producing protein-
polymer or peptide-polymer
conjugates (claimed) useful as
therapeutic drugs in medicines.

ADVANTAGE - The linker conjugates a
reduced number of polymer
derivatives to the active sites of
proteins, and does not decrease the
biological activity of the proteins or
peptides. The conjugates are stable
from protease degradation, have improved
water solubility, reduce the
steric hindrance in active sites of
proteins and retain the biological
activity for a long period of time, thus
have improved bioavailability of
the bioactive proteins and peptides. The
protein-polymer or
peptide-polymer conjugates minimize the
number of administrations and are
capable of decreasing the side effects in
accordance with over drug abuse.

Dwg.0/5

L7 ANSWER 9 OF 30 CAPLUS COPYRIGHT 2004
ACS on STN
ACCESSION NUMBER: 2002:171721 CAPLUS
DOCUMENT NUMBER: 136:205468
TITLE: ***G*** -
CSF solution compositions
stabilized over long
time
INVENTOR(S): Sato, Yasushi
PATENT ASSIGNEE(S): Chugai Seiyaku
Kabushiki Kaisha, Japan
SOURCE: PCT Int. Appl., 23
pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE
APPLICATION NO.	DATE	
WO 2002017957	A1	20020307
2001-JP7600	20010903	
W: AE, AG, AL, AM, AT, AU, AZ, BA,		
BB, BG, BR, BY, BZ, CA, CH, CN,		
CO, CR, CU, CZ, DE, DK, DM, DZ,		
EC, EE, ES, FI, GB, GD, GE, GH,		

GM, HR, HU, ID, IL, IN, IS, JP,
 KE, KG, KP, KR, KZ, LC, LK, LR,
 LS, LT, LU, LV, MA, MD, MG, MK,
 MN, MW, MX, MZ, NO, NZ, PH, PL,
 PT, RO, RU, SD, SE, SG, SI, SK,
 SL, TJ, TM, TR, TT, TZ, UA, UG,
 US, UZ, VN, YU, ZA, ZW, AM, AZ,
 BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL,
 SZ, TZ, UG, ZW, AT, BE, CH, CY,
 DE, DK, ES, FI, FR, GB, GR, IE,
 IT, LU, MC, NL, PT, SE, TR, BF,
 BJ, CG, CI, CM, GA, GN, GQ,
 GW, ML, MR, NE, SN, TD, TG
 AU 2001082607 A5 20020313 AU
 2001-82607 20010903
 EP 1329224 A1 20030723 EP
 2001-961312 20010903
 R: AT, BE, CH, DE, DK, ES, FR, GB,
 GR, IT, LI, LU, NL, SE, MC, PT,
 IE, SI, LT, LV, FI, RO, MK, CY,
 AL, TR
 US 2004037803 A1 20040226 US
 2003-362921 20030227
 PRIORITY APPLN. INFO.: JP
 2000-266095 A 20000901

WO
 2001-JP7600 W 20010903
 AB Disclosed are ***G*** - ***CSF***
 soln. compns. which are
 substantially free from any protein as a
 stabilizer and contain at least
 one amino acid or its salt as a
 stabilizer. A soln. 1 mL (pH = 6.5)
 contg. ***G*** - ***CSF*** 25
 .mu.g/mL, histidine hydrochloride 0.4,
 methionine 0.1, polysorbate-20 0.01 %,
 and 100 mM NaCl was formulated and
 filled in a glass vial for testing its
 stability during storage.
 REFERENCE COUNT: 25 THERE ARE 25
 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL
 CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 10 OF 30 WPIDS COPYRIGHT 2004
 THOMSON DERWENT on STN
 ACCESSION NUMBER: 2002-075094 [10] WPIDS
 DOC. NO. CPI: C2002-022327
 TITLE: Protein conjugates that
 selectively target certain
 tissues and organs
 useful for treating and preventing
 various diseases,
 comprises glucose-aminoglycan-targeting
 domain conjugated to a
 therapeutic protein.
 DERWENT CLASS: B04 D16
 INVENTOR(S): SEREDA, T J; WIEBE, D J;
 WILLIAMS, A M; WOLOSKI, B M R
 PATENT ASSIGNEE(S): (CANG-N) CANGENE CORP;
 (SERE-I) SEREDA T J; (WIEB-I)
 WIEBE D J; (WILL-I)
 WILLIAMS A M; (WOLO-I) WOLOSKI B M R
 COUNTRY COUNT: 96
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK
LA PG			

WO 2001080899 A2 20011101 (200210)* EN
 121
 RW: AT BE CH CY DE DK EA ES FI FR GB
 GH GM GR IE IT KE LS LU MC MW MZ
 NL OA PT SD SE SL SZ TR TZ UG ZW
 W: AE AG AL AM AT AU AZ BA BB BG BR
 BY BZ CA CH CN CO CR CU CZ DE DK
 DM DZ EE ES FI GB GD GE GH GM HR
 HU ID IL IN IS JP KE KG KP KR KZ
 LC LK LR LS LT LU LV MA MD MG MK
 MN MW MX MZ NO NZ PL PT RO RU SD
 SE SG SI SK SL TJ TM TR TT TZ UA
 UG US UZ VN YU ZA ZW
 AU 2001050212 A 20011107 (200219)
 EP 1274461 A2 20030115 (200306) EN
 R: AL AT BE CH CY DE DK ES FI FR GB
 GR IE IT LI LT LU LV MC MK NL PT
 RO SE SI TR
 US 2004037834 A1 20040226 (200416)

APPLICATION DETAILS:

PATENT NO	KIND	DATE
WO 2001080899	A2	20010420
2001-CA533	A	20010420
2001-50212	A2	20010420
EP 1274461	A2	20010420
2001-923439	A1	20010420
2001-CA533	A1	20010420
US 2004037834	A1	20010420
2001-CA533	A1	20010420
2003-257377	A1	20030610

FILING DETAILS:

PATENT NO	KIND	DATE
AU 2001050212	A	Based on
2001080899	A2	Based on
EP 1274461	A2	Based on
2001080899	A2	Based on

PRIORITY APPLN. INFO: US 2000-198613P
 20000420; US

2003-257377
 20030610
 AN 2002-075094 [10] WPIDS
 AB WO 200180899 A UPAB: 20020213
 NOVELTY - A conjugate (I) comprising an
 hyaluronic acid (HA)-binding
 protein (HABP1) or peptide (HABP2)
 contiguous with, or coupled to a
 polypeptide conjugated to a therapeutic
 agent, is new.

DETAILED DESCRIPTION - INDEPENDENT
 CLAIMS are also included for the
 following:

(1) an isolated and purified nucleic
 acid sequence (II) encoding an
 HABP1 or peptide in sequence with a
 therapeutic agent;
 (2) preparation (M1) of (I) by
 inserting a first nucleotide sequence

encoding a HABP1 directly linked to a second nucleotide sequence encoding a therapeutic protein into a suitable vector, expressing the vector in an acceptable host, purifying conjugate molecule from host or expression medium;

(3) preparing a pharmaceutical for treating an animal in need of treatment, comprising the preparation of (I) and suspending (I) in a carrier, diluent or excipient;

(4) pharmaceutical composition (III) comprising (I).

ACTIVITY - Immunosuppressive; cytostatic.

MECHANISM OF ACTION - Gene therapy. USE - (I) is useful for altering in vivo the distribution of a therapeutic agent comprising administering (I) to the animal where conjugate molecule will distribute primarily in tissues and organs containing high levels of endogenous HA; and for treating mammal with a disorder where a diseased tissue of the mammal contains high level of HA (claimed).

ADVANTAGE - Lower therapeutic dosages required also translates into lower immunogenicity of the conjugated protein as compared to the native protein. As a result, conjugates improves patient compliance and reduce direct and indirect costs associated with the drug substance and its administration. Conjugates allows for the use, where appropriate, of lower, safer, dosages as compared to the conventional dosage requirements for the unconjugated corresponding therapeutic agent. Conjugate molecules has an increased half-life and potency, resulting in prolonged circulation of the molecule, efficient distribution into the target tissues, and increased bioavailability. Dwg.0/0

L7 ANSWER 11 OF 30 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:747645 CAPLUS

DOCUMENT NUMBER: 135:293985

TITLE: Powdery preparation for transmucosal administration

containing a polymeric form of drug and exhibiting improved storage

stability

INVENTOR(S): Nomura, Hideaki; Ueki, Yosuke

PATENT ASSIGNEE(S): Kirin Beer Kabushiki Kaisha, Japan

SOURCE: PCT Int. Appl., 28

PP.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO. KIND DATE
APPLICATION NO. DATE

WO 2001074397 A1 20011011 WO
2001-JP2555 20010328

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

AU 2001044584 A5 20011015 AU
2001-44584 20010328

EP 1273306 A1 20030108 EP
2001-917538 20010328

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY,

AL, TR

PRIORITY APPLN. INFO.: JP
2000-99213 A 20000331

WO

2001-JP2555 W 20010328
AB Disclosed is a powdery prepn. for transmucosal administration contg. a polymeric form of drug, a cationic polymer, and, if necessary, a thickener polymer, characterized by further contg. an effective amt. of a basic amino acid. This powdery prepn. is improved in the storage stability of the polymeric form of drug while keeping the improved transmucosal absorbability of the polymeric form of drug. A soln. was formulated contg. ***G*** - ***CSF*** 10,

Eudragit E100 5, L-histidine 2, D-mannitol 78.8 %, and buffering agents q.s. (to pH 4) and the soln. was spray-dried to give powders for nasal administration.

REFERENCE COUNT: 8 THERE ARE 8
CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL
CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 12 OF 30 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 2001:861500 CAPLUS

DOCUMENT NUMBER: 136:602

TITLE: Hemopoietic growth factor antagonists useful in

treatment of cancer and inflammation

INVENTOR(S): Vadas, Mathew Alexander; Lopez, Angel Francisco;

Shannon, Mary Francis; Cheah, Keat-chye; Senn, Carol

Ruth; Bastiras, Stan;
Robins, Allan
PATENT ASSIGNEE(S): Breasagen Limited,
Australia
SOURCE: U.S., 25 pp., Cont.-
in-part of U.S. 5,939,063.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	
APPLICATION NO.	DATE		
US 6322791	B1	20011127	US
1998-983523	19980528		
US 5939063	A	19990817	US
1996-591438	19960408		
AU 9934974	A1	19990909	AU
1999-34974	19990611		
PRIORITY APPLN. INFO.:			AU
1995-3780	A	19950623	US
1996-591438	A2	19960408	WO
1996-AU3820	W	19960621	AU
1993-186	A	19930728	AU
1994-4772	A	19940330	WO
1994-AU432	W	19940728	AU

1996-61153 A3 19960621
AB The present invention relates generally
to variant recombinant forms of
hemopoietic growth factors useful as
antagonists to the corresponding
native hemopoietic growth factor and
their use in ameliorating aberrant
effects caused by the native mols. and in
the treatment of tumors and
cancers and inflammation. A method for
inducing apoptosis of a cell that
comprises the .alpha.-chain of the
granulocyte macrophage colony
stimulating factor (GM-CSF) receptor is
described. The method comprises
the step of contacting the cells with an
effective amt. of a modified
GM-CSF polypeptide, which binds to the
.alpha.-chain of the GM-CSF
receptor, for a time and under conditions
sufficient to induce apoptosis.
The modified GM-CSF polypeptide comprises
a mutation of the glutamate at
position 21 of the amino acid sequence of
wild-type native GM-CSF to an
amino acid selected from the group
consisting of ***arginine***,
lysine, glutamine and
asparagine. The cells in which apoptosis is
induced are normal or malignant myeloid
cells, such as myeloid leukemia
cells. A method for selecting bone
marrow cells lacking the .alpha.-chain
of the GM-CSF receptor comprises (i)
contacting said bone marrow cells

with an effective amt. of a modified GM-
CSF polypeptide for a time and
under conditions sufficient to induce
apoptosis of cells expressing the
.alpha.-chain of the GM-CSF receptor, and
(ii) selecting cells that do not
undergo apoptosis, i.e., cells lacking
the .alpha.-chain of the GM-CSF
receptor.
REFERENCE COUNT: 12 THERE ARE 12
CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL
CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 13 OF 30 WPIDS COPYRIGHT 2004
THOMSON DERWENT on STN DUPLICATE 3
ACCESSION NUMBER: 2000-647203 [62] WPIDS
DOC. NO. CPI: C2000-195762
TITLE: Novel composition
comprising at least 1 megakaryocyte and
at least 1 compound that
donates, transfers or releases
nitric oxide, useful for
the treatment of blood disorders
such as
thrombocytopenia, thrombocythemia or
thrombocytopathy.
DERWENT CLASS: B04 D16
INVENTOR(S): BATTINELLI, E M;
LOSCALZO, J
PATENT ASSIGNEE(S): (UYBO-N) UNIV BOSTON
COUNTRY COUNT: 92
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK
LA PG			
WO 2000057891	A1	20001005	(200062)* EN
50			
RW: AT BE CH CY DE DK EA ES FI FR GB			
GH GM GR IE IT KE LS LU MC MW NL			
OA PT SD SE SL SZ TZ UG ZW			
W: AE AG AL AM AT AU AZ BA BB BG BR			
BY CA CH CN CR CU CZ DE DK DM DZ			
EE ES FI GB GD GE GH GM HR HU ID			
IL IN IS JP KE KG KP KR KZ LC LK			
LR LS LT LU LV MA MD MG MK MN MW			
MX NO NZ PL PT RO RU SD SE SG SI			
SK SL TJ TM TR TT TZ UA UG US UZ			
VN YU ZA ZW			
AU 2000038778	A	20001016	(200106)
US 6589759	B1	20030708	(200353)

APPLICATION DETAILS:

PATENT NO	KIND	
APPLICATION	DATE	
WO 2000057891	A1	WO
2000-US6436	20000330	
AU 2000038778	A	AU
2000-38778	20000330	
US 6589759	B1 Provisional	US
1999-126854P	19990330	WO
2000-US6436	20000330	US
2001-937336	20011205	

FILING DETAILS:

PATENT NO	KIND		
AU 2000038778	A	Based on	WO
2000057891			
US 6589759	B1	Based on	WO
2000057891			

PRIORITY APPLN. INFO: US 1999-126854P
19990330; US

2001-937336
20011205
AN 2000-647203 [62] WPIDS
AB WO 200057891 A UPAB: 20001130
NOVELTY - Composition comprising at least
1 megakaryocyte (I) and at least
1 compound (II) or its salt that donates,
transfers or releases nitric
oxide, or induces the production of
endogenous nitric oxide or
endothelium-derived relaxing factor or is
a substrate for nitric oxide
synthase, is new.

DETAILED DESCRIPTION - INDEPENDENT
CLAIMS are provided for:
(1) a method of producing platelets
or proplatelets in vitro
comprising adding the composition to at
least 1 megakaryocyte in culture;
(2) a method of producing platelets
or proplatelets in vivo in a
patient comprising administration of the
composition to the patient;
(3) a method of treating or
preventing a blood platelet disorder in a
patient comprising administration of the
composition to the patient;

(4) a method of decreasing platelet
counts in a patient comprising
administration of at least one compound
that inhibits production of nitric
oxide synthase; and

(5) a method of treating or
preventing a blood platelet disorder in a
patient, comprising:

(a) providing at least one
megakaryocyte in culture;
(b) adding at least one compound
(II) to (a) to produce platelets
and/or proplatelets; and
(c) administering the platelets
and/or proplatelets to the patient.

ACTIVITY - Hemostatic.

No biological data is given.

MECHANISM OF ACTION - Nitric oxide
synthase production inhibition.

USE - The composition is used to
treat blood disorders such as
thrombocytopenia, thrombocythemia or
thrombocytopenia (claimed)

Dwg.0/2

L7 ANSWER 14 OF 30 WPIDS COPYRIGHT 2004
THOMSON DERWENT on STN
ACCESSION NUMBER: 2000-430219 [37] WPIDS
DOC. NO. CPI: C2000-130691
TITLE: Multivesicular liposomes
having non-concentric chambers

with membranes
distributed in matrix useful for
controlled release of
active agents.
DERWENT CLASS: B05 B07 C03 C07
INVENTOR(S): HOWELL, S B; KIM, S
PATENT ASSIGNEE(S): (SKYE-N) SKYEPHARMA INC
COUNTRY COUNT: 1
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK
LA PG			
US 6071534	A	20000606	(200037)*
12			

APPLICATION DETAILS:

PATENT NO	KIND		
APPLICATION	DATE		
US 6071534	A	CIP of	US
1988-151553	19880218	CIP of	US
1990-563365	19900806	Cont of	US
1991-709744	19910603	Cont of	US
1993-20483	19930223	CIP of	US
1994-352342	19941207	Div ex	US
1995-473019	19950606		US
1998-19337	19980205		

FILING DETAILS:

PATENT NO	KIND		
PATENT NO			
US 6071534	A	Div ex	US
5807572			

PRIORITY APPLN. INFO: US 1995-473019
19950606; US

1988-151553
1990-563365
1991-709744
1993-20483
1994-352342
1998-19337
19980205
AN 2000-430219 [37] WPIDS
AB US 6071534 A UPAB: 20000807
NOVELTY - Multivesicular liposome having
non-concentric chambers with
membranes distributed in a matrix is
produced by dispersing a water in oil
emulsion comprising a lipid component,
aqueous component and a
hydrochloride into a second aqueous
component.

DETAILED DESCRIPTION -
Multivesicular liposome having non-concentric chambers with membranes distributed in a matrix is produced by:

(1) forming a water-in-oil emulsion from a lipid component comprising an organic solvent, an amphipathic lipid and a neutral lipid lacking a hydrophilic head group and an aqueous component and which contains 10-500 mM hydrochloric acid, ***arginine*** hydrochloride, histidine hydrochloride, ***lysine*** hydrochloride and/or pyridine hydrochloride, and at least one biologically active substance;

(2) dispersing the water-in-oil emulsion into a second aqueous component to form solvent spherules and

(3) removing the organic solvent from the spherules to form the liposomes suspended in the second aqueous component.

The concentration of hydrohalide is selected to modulate the in vivo release rate of the biologically active substance.

USE - Useful for the controlled release of active agents encapsulated in the presence of a hydrochloride. The liposome is used to give prolonged and sustained in vivo exposure at a disease site of a therapeutic concentration of the active substance

ADVANTAGE - The liposomes provide high encapsulation efficiency, controlled release rate, well defined, reproducible size distribution and adjustable internal chamber size and number.

Dwg.0/1

L7 ANSWER 15 OF 30 CAPLUS COPYRIGHT 2004
ACS on STN
ACCESSION NUMBER: 2000:628014 CAPLUS
DOCUMENT NUMBER: 133:213193
TITLE: Stabilized
formulations of proteins
INVENTOR(S): Sato, Yasushi
PATENT ASSIGNEE(S): Chugai Seiyaku
Kabushiki Kaisha, Japan
SOURCE: PCT Int. Appl., 32
PP.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE
APPLICATION NO.	DATE	
WO 2000051629	A1	20000908
2000-JP1160	20000229	WO
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA,	

MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
JP 2000247903 A2 20000912 JP
1999-52314 19990301
EP 1197221 A1 20020417 EP
2000-905397 20000229
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
PRIORITY APPLN. INFO.: JP
1999-52314 A 19990301
WO

2000-JP1160 W 20000229
AB Disclosed are stable ***G*** -
CSF preps. showing a residual
G - ***CSF*** ratio of 90 %
or more after a long-term storage
test at 25.degree. for 3 mo; showing a
residual ***G*** - ***CSF***
ratio of 90 % or more after a long-term
storage test at 40.degree. for 2
mo; showing a residual ***G*** -
CSF ratio of 90 % or more
after an accelerated test at 50.degree.
for 1 mo; or showing a residual
G - ***CSF*** ratio of 90 %
or more after an accelerated test at
60.degree. for 2 wk; and showing a ratio
of the formation of the
methionine residue-oxidized deriv. of
G - ***CSF*** of 1 % or
less after an accelerated test at
50.degree. for 1 mo or after an
accelerated test at 60.degree. for 2 wk.
A method for inhibiting the
formation of the methionine residue-
oxidized deriv. of a physiol. active
protein having methionine residues, is
characterized by adding methionine
to a compn. contg. this protein.
REFERENCE COUNT: 21 THERE ARE 21
CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL
CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 16 OF 30 CAPLUS COPYRIGHT 2004
ACS on STN
ACCESSION NUMBER: 2000:573832 CAPLUS
DOCUMENT NUMBER: 133:176185
TITLE: Ligand-binding domain
of common .beta.c chain of
interleukin-3,
interleukin-5, and GM-CSF receptors
INVENTOR(S): Bagley, Christopher
James; Rossjohn, Jamie; Mckinstry,
William John;
Woodcock, Joanna May; Parker, Michael
William; Lopez, Angel
Francisco
PATENT ASSIGNEE(S): Medvet Science Pty
Ltd, Australia; St Vincents

Research Institute of Medical
SOURCE: PCT Int. Appl., 47
PP.

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO. KIND DATE
APPLICATION NO. DATE

WO 2000047620 A1 20000817 WO
2000-AU79 20000208

W: AE, AL, AM, AT, AU, AZ, BA, BB,
BG, BR, BY, CA, CH, CN, CR, CU,
CZ, DE, DK, DM, EE, ES, FI, GB,
GD, GE, GH, GM, HR, HU, ID, IL,
IN, IS, JP, KE, KG, KP, KR, KZ,
LC, LK, LR, LS, LT, LU, LV, MA,
MD, MG, MK, MN, MW, MX, NO, NZ,
PL, PT, RO, RU, SD, SE, SG, SI,
SK, SL, TJ, TM, TR, TT, TZ, UA,
UG, US, UZ, VN, YU, ZA, ZW, AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ,
TZ, UG, ZW, AT, BE, CH, CY, DE,
DK, ES, FI, FR, GB, GR, IE, IT,
LU, MC, NL, PT, SE, BF, BJ, CF,
CG, CI, CM, GA, GN, GW, ML, MR,
NE, SN, TD, TG

EP 1161453 A1 20011212 EP
2000-904705 20000208

R: AT, BE, CH, DE, DK, ES, FR, GB,
GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO

JP 2002541061 T2 20021203 JP

2000-598535 20000208

NZ 513507 A 20030829 NZ

2000-513507 20000208

ZA 2001006536 A 20020808 ZA

2001-6536 20010808

US 2003044975 A1 20030306 US

2001-913419 20010808

PRIORITY APPLN. INFO.: AU

1999-8576 A 19990208 AU

1999-8577 A 19990209 AU

1999-264 A 19990511 AU

2000-AU79 W 20000208 WO

AB The authors present a structural and
functional characterization of a
portion of the B'-C' loop of domain 4 of
the cytokine receptor common
.beta.c chain. In one aspect of the
invention, the characterization
provides for identifying compds. having
cytokine agonist or antagonist
activity.

REFERENCE COUNT: 3 THERE ARE 3

CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL

CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 17 OF 30 BIOSIS COPYRIGHT 2004

BIOLOGICAL ABSTRACTS INC. on STN

ACCESSION NUMBER: 2001:311668 BIOSIS

DOCUMENT NUMBER: PREV200100311668
TITLE: Cytokine regulation of
inducible nitric oxide synthase
(NOS2) and NOS2 inhibitor-
induced apoptosis and death in
chronic lymphocytic
leukemia cells.

AUTHOR(S): Levesque, Marc C. [Reprint
author]; Misukonis, Mary A.
[Reprint author];
O'Loughlin, Charles W.; Wilson, D. Lee;
Adams, David J.; Silber,
Robert; Weinberg, J. Brice

[Reprint author]
CORPORATE SOURCE: Department of Medicine, VA
and Duke University Medical

Centers, Durham, NC, USA
Blood, (November 16, 2000)
Vol. 96, No. 11 Part 1, pp.

159a. print.
Meeting Info.: 42nd Annual
Meeting of the American Society
of Hematology. San
Francisco, California, USA. December
01-05, 2000. American
Society of Hematology.

CODEN: BLOOAW. ISSN: 0006-
4971.

DOCUMENT TYPE: Conference; (Meeting)

Conference; Abstract;

(Meeting Abstract)

LANGUAGE: English

ENTRY DATE: Entered STN: 27 Jun 2001

Last Updated on STN: 19

Feb 2002

AB Chronic lymphocytic leukemia (B-CLL) is a
malignancy of a mantle
zone-based subpopulation of anergic,
self-reactive, activated CD5+ B
lymphocytes devoted to the production of
polyreactive natural
autoantibodies. B-CLL is characterized
by the accumulation of long-lived
non-dividing CD5+B cells in Go of the
cell cycle. Nitric oxide (NO) is an
important regulator of apoptosis, and the
viability of cultured B-CLL
cells is dependent on the autocrine
production of NO by NOS2. Inhibition
of NOS2 induces B-CLL cell apoptosis.
The purpose of this study to
determine whether cytokine factors that
prevent spontaneous in vitro
apoptosis of B-CLL cells induce B-cell
NOS2 enzyme activity and NO
production and prevent NOS2 inhibitor-
induced B-CLL cell apoptosis. Cells
were from patients with CD5+ B-CLL with
WBC>20,000/uL; all had not
received leukemia therapy within the last
4 weeks. Peripheral blood
mononuclear cells (PBMC) were isolated
from blood using ficoll-Hypaque,
and T cells and monocytes were depleted
using magnetic beads coupled with
anti-CD2 and anti-CD14 antibodies. The
resultant cells were 90+-2%
CD5+/CD19+ and 3+-2% CD5-/CD19+ (N=45).
We found that B-CLL cells
expressed NOS2 as determined by an enzyme
assay (8 fold greater expression

in B-CLL cells than in normal PBMC), by immunoblot (0/12 positive for NOS2 in normal PBMC vs 12/15 positive in CLL), and by RT-PCR analysis (0/10 positive for NOS2 in normal PBMC vs 13/13 positive in B-CLL cells). IL-4 and IFNgamma significantly increased B-CLL cell NOS2 enzyme activity and protein expression during in vitro culture. However, IFNalpha, nerve growth factor, IL-6, IL-2, IL-8, and ***G*** - ***CSF*** had no significant effects. We were unable to detect increased concentrations of nitrite or nitrate (surrogate markers of NO production) in B-CLL cell cultures treated with IL-4 or IFNgamma. IL-4 and IFNgamma significantly inhibited NOS2 B-CLL cell death and apoptosis induced by the NOS2-specific inhibitor L-N6-(1-iminoethyl)-***lysine*** (L-NIL) or the nonspecific NOS inhibitor NG-monomethyl-L-***arginine*** (NMMA). In summary, we found that B-CLL cells expressed NOS2, that IL-4 and IFNgamma increased B-CLL NOS2 expression, and that IL-4 and IFNgamma prevented NOS2 inhibitor-induced B-CLL cell death and apoptosis. Expression of NOS2 by B-CLL cells may promote their survival. NOS2 and NO may represent new molecular targets in the treatment of B-CLL.

L7 ANSWER 18 OF 30 MEDLINE on STN
 DUPLICATE 4
 ACCESSION NUMBER: 1999248663 MEDLINE
 DOCUMENT NUMBER: PubMed ID: 10231881
 TITLE: Formulation of proteins in vacuum-dried glasses. II.
 Process and storage stability in sugar-free amino acid systems.
 AUTHOR: Mattern M; Winter G; Kohnert U; Lee G
 CORPORATE SOURCE: Department of Pharmaceutical Technology, Friedrich-Alexander University, Erlangen, Germany.
 SOURCE: Pharmaceutical development and technology, (1999 May) 4 (2) 199-208.
 Journal code: 9610932.

ISSN: 1083-7450.
 PUB. COUNTRY: United States
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
 LANGUAGE: English
 FILE SEGMENT: Priority Journals
 ENTRY MONTH: 199906
 ENTRY DATE: Entered STN: 19990628
 Last Updated on STN:

19990628 Entered Medline: 19990617
 AB The purpose of this research was to investigate the freeze- and vacuum-drying behavior of L-amino acids of current/potential use as adjuvants for formulating proteins. The analytical methods used were

wide-angle x-ray diffraction, differential scanning calorimetry, and scanning electron microscopy. Protein analysis was performed either as an activity assay (lactate dehydrogenase [LDH]) or by size-exclusion chromatography (***granulocyte*** ***colony*** - ***stimulating*** ***factor*** [rhG-CSF]). After samples were freeze-dried, only the four basic amino acids (***arginine*** , ***lysine*** , histidine, and citrulline) formed amorphous solids, which, however, were partially crystalline. The remaining amino acids all formed fully crystalline solids. After samples were vacuum-dried, (20 degrees C, 0.1 mbar, 1 ml fill volume in 2-ml vials) fully crystalline solids were formed by all of the amino acids. For ***arginine*** , the addition of either HCL, H3PO4, or H2SO4 sufficient to form the respective salt produced amorphous solids after vacuum-drying, but they had high residual water contents and low glass transition temperatures (Tg). Addition of phenylalanine to ***arginine*** base inhibited crystallization of the latter at low concentrations during vacuum-drying procedure, leading to formation of a pure rubbery solid. At higher concentrations the phenylalanine crystallized, producing dry products with glass transition temperatures of > 60 degrees C. The process and storage stability of LDH and rhG-CSF in the vacuum-dried phenylalanine/ ***arginine*** glasses was greatly improved at temperatures up to 40 degrees C compared with the unprotected proteins. Uptake of moisture during storage was, however, a complicating factor, reducing Tg, promoting crystallization, and leading to decreased protein stability. The PO4 salt of ***arginine*** produced especially high glass transition temperatures after it was vacuum-dried. These sugar-free amino acid formulations thus are potential stabilizes for proteins.

L7 ANSWER 19 OF 30 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1998:604601 CAPLUS
 DOCUMENT NUMBER: 129:235651
 TITLE: Multivesicular liposomes having a biologically active substance encapsulated therein in the presence of a hydrochloride
 INVENTOR(S): Kim, Sinil; Howell, Stephen B.
 PATENT ASSIGNEE(S): Depotech Corporation, USA
 SOURCE: U.S., 12 pp., Cont.-in-part of U.S. Ser. No. 352,342, abandoned.
 CODEN: USXXAM

DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	
APPLICATION NO.	DATE		
US 5807572	A	19980915	US
1995-473019	19950606		
US 6071534	A	20000606	US
1998-19337	19980205		
PRIORITY APPLN. INFO.:			US
1988-151553	B2	19880218	

1990-563365 B2 19900806 US
1991-709744 B1 19910603 US
1993-20483 B1 19930223 US
1994-352342 B2 19941207 US
1995-473019 A3 19950606
AB Disclosed are multivesicular liposomes contg. biol. active substances, the multivesicular liposomes having defined size distribution, adjustable av. size, adjustable internal chamber size and no., and a modulated rate of the biol. active substance in contrast to the previous art. The process comprises dissolving a lipid component in volatile org. solvents, adding an immiscible aq. component contg. at least one biol. active substance to be encapsulated, and adding to either or both the org. solvents and the lipid component, a hydrochloride effective to control the release rate of the biol. active substance from the multivesicular liposome, making a water-in-oil emulsion from the two components, immersing the emulsion into a second aq. component, dividing the emulsion into small solvent spherules which contain even smaller aq. chambers, and then removing the solvents to give an aq. suspension of multivesicular liposomes encapsulating biol. active substances. Multivesicular liposomes with encapsulation of 59% cytarabine (I) contg. hydrochloric acid (II) were prepd. Percentage of retained I at 24 h was 93% in contrast to 52% when II was not used.

REFERENCE COUNT: 62 THERE ARE 62
CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL
CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 20 OF 30 CAPLUS COPYRIGHT 2004
ACS on STN
ACCESSION NUMBER: 1998:175302 CAPLUS
DOCUMENT NUMBER: 128:208941
TITLE: Multivesicular
liposomes having a biologically active
substance
encapsulated in it in the presence of a
hydrochloride

INVENTOR(S): Kim, Sinil; Howell,
Stephen B.
PATENT ASSIGNEE(S): DepoTech Corp., USA
SOURCE: U.S., 11 pp., Cont.-
in-part of U.S. Ser. No. 352,342,
abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	
APPLICATION NO.	DATE		
US 5723147	A	19980303	US
1995-472126	19950606		
PRIORITY APPLN. INFO.:			GB
1987-4171	A	19870223	
1988-151553	B2	19880218	US
1990-563365	B2	19900806	US
1991-709744	B1	19910603	US
1993-20483	B1	19930223	US
1994-352342	B2	19941207	

AB Disclosed are multivesicular liposomes contg. biol. active substances, the multivesicular liposomes having defined size distribution, adjustable av. size, adjustable internal chamber size and no., and a modulated rate of the biol. active substance in contrast to the previous art. The process comprises dissolving a lipid component in volatile org. solvents, adding an immiscible aq. component contg. at least one biol. active substance to be encapsulated, and adding to either or both the org. solvents and the lipid component, a hydrochloride effective to control the release rate of the biol. active substance from the multivesicular liposome, making a water-in-oil emulsion from the two components, immersing the emulsion into a second aq. component, dividing the emulsion into small solvent spherules which contain even smaller aq. chambers, and then removing the solvents to give an aq. suspension of multivesicular liposomes encapsulating biol. active substances. Thus, 1 mL of a chloroform soln. contg. 9.3 mmoles of dioleoyl phosphatidylcholine, 2.1 mmoles of dipalmitoyl phosphatidylglycerol, 15 mmoles of cholesterol, and 1.8 mmoles of triolein was added to one ml of an aq. soln. contg. 20 mg/mL of cytarabine and 136 mM of hydrochloric acid. The emulsion thus obtained was mixed with a soln. contg. 4% glucose and 40 mM ***lysine*** and stirred, the chloroform was then evapd. to obtain multivesicular liposomes which were

sepd. by centrifugation. The retained
cytarabine in the liposomes at 24 h
was 93% when hydrochloric acid was
present, in contrast to 52% when
hydrochloric acid was not present.

REFERENCE COUNT: 57 THERE ARE 57
CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL
CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 21 OF 30 CAPLUS COPYRIGHT 2004
ACS on STN
ACCESSION NUMBER: 1998:250643 CAPLUS
DOCUMENT NUMBER: 128:248565
TITLE: Bioactive and/or
targeted dendrimer conjugates
INVENTOR(S): Tomalia, Donald A.;
Baker, James R.; Cheng, Roberta
C.; Bielinska, Anna
U.; Fazio, Michael J.; Hedstrand,
David M.; Johnson,
Jennifer A.; Kaplan, Donald A.;
Klakamp, Scott L.; et
al.

PATENT ASSIGNEE(S): Dow Chemical Co.,
USA; Dendritech Inc.; University of
Michigan
SOURCE: U.S., 139 pp., Cont.
-in-part of U. S. Ser. No.

316,536, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 9
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5714166	A	19980203	1995-400203	19950307
BR 8707431	A	19881101	1987-7431	19870419
AT 89743	E	19930615	1987-307266	19870817
JP 63501878	T2	19880728	1987-505282	19870818
JP 07002840	B4	19950118	JP 63502350	T2
1987-505084	19870818	JP 07057735	B4	19950621
BR 8707433	A	19881101	1987-7433	19870818
FI 8801768	A	19880415	1988-1768	19880415
US 5338532	A	19940816	1991-654851	19910213
US 5527524	A	19960618	1993-43198	19930405
CA 2161684	AA	19950914	1995-2161684	19950307
ZA 9501877	A	19960909	1995-1877	19950307
RU 2127125	C1	19990310	1995-122714	19950307
IL 128773	A1	20010520	1995-128773	19950307
IL 128774	A1	20010520	1995-128774	19950307

IL 128775	A1	20010520	1995-128775	19950307
IL 112920	A1	20030410	1995-112920	19950307
FI 9801807	A	19980824	1998-1807	19980824
AU 768662	B2	20031218	2002-29312	20020328
AU 2002029312	A5	20020523	1986-897455	B2
PRIORITY APPLN. INFO.:			1987-87266	B2
1989-386049	B2	19890726	1991-654851	A2
1993-43198	A2	19930405	1993-43198	A2
1994-207494	B2	19940307	1994-316536	B2
1987-307266	A	19870817	1987-US2075	W
1987-US2076	A	19870818	1995-112920	A3
1999-64440	A3	19991210		

AB Dendritic polymer conjugates which are
composed of at least one dendrimer
in assocn. with at least one unit of a
carried material, where the carrier
material can be a biol. response
modifier, have been prepd. The conjugate
can also have a target director present,
and when it is present then the
carried material may be a bioactive
agent. Preferred dendritic polymers
are dense star polymers, which have been
complexed with biol. response
modifiers. These conjugates and
complexes have particularly advantageous
properties due to their unique
characteristics.

REFERENCE COUNT: 135 THERE ARE 135
CITED REFERENCES AVAILABLE FOR

THIS RECORD.
ALL CITATIONS AVAILABLE IN THE RE
FORMAT

L7 ANSWER 22 OF 30 CAPLUS COPYRIGHT 2004
ACS on STN
ACCESSION NUMBER: 1997:625591 CAPLUS
DOCUMENT NUMBER: 127:290229
TITLE: Hematopoietic cell
culture nutrient supplement
INVENTOR(S): Daley, John P.;
Dadey, Barbara M.; Biddle, William;
Wysocki, Michelle G.
PATENT ASSIGNEE(S): Life Technologies,
Inc., USA
SOURCE: PCT Int. Appl., 73
pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9733978	A1	19970918	WO	
1997-US1867		19970131		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2248142	AA	19970918	CA	
1997-2248142		19970131		
AU 9722600	A1	19971001	AU	
1997-22600		19970131		
EP 891419	A1	19990120	EP	
1997-905789		19970131		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2000507812	T2	20000627	JP	
1997-532595		19970131		
US 2001033835	A1	20011025	US	
1997-792299		19970131		
US 6733746	B2	20040511		
US 2004072349	A1	20040415	US	
2003-716619		20031120		
PRIORITY APPLN. INFO.: US				
1996-13149P	P	19960312		
1997-792299	A1	19970131		
WO				

1997-US1867 W 19970131
 AB The present invention provides a serum-free supplement which supports the growth of hematopoietic cells in culture. The supplement contains .gtoreq.1 ingredients selected from the group consisting of .gtoreq.1 antioxidant, .gtoreq.1 albumin or albumin substitute, .gtoreq.1 lipid agent, .gtoreq.1 insulin or insulin substitute, .gtoreq.1 transferrin or transferrin substitute, .gtoreq.1 trace element, and .gtoreq.1 glucocorticoid, wherein a basal cell culture medium supplemented with the supplement is capable of supporting the expansion of CD34+ hematopoietic cells and cells of myeloid lineage, in serum-free culture. The present invention also provides methods for culturing and for differentiating hematopoietic cells.

L7 ANSWER 23 OF 30 CAPLUS COPYRIGHT 2004
 ACS on STN

ACCESSION NUMBER: 1997:394163 CAPLUS
 DOCUMENT NUMBER: 127:23753
 TITLE: Stabilization of biological materials by drying without freezing
 Inventor(S): Winter, Gerhard
 Patent Assignee(S): Boehringer Mannheim GmbH, Germany
 SOURCE: Ger. Offen., 32 pp. CODEN: GWXXBX
 DOCUMENT TYPE: Patent
 LANGUAGE: German
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 19539574	A1	19970430	DE	
1995-19539574		19951025		
CA 2235243	AA	19970501	CA	
1996-2235243		19961024		
CA 2235243	C	20030422		
WO 9715288	A2	19970501	WO	
1996-EP4627		19961024		
WO 9715288	A3	19970529		
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM				
AU 9672984	A1	19970515	AU	
1996-72984		19961024		
AU 712489	B2	19991111		
ZA 9608930	A	19980424	ZA	
1996-8930		19961024		
EP 857060	A2	19980812	EP	
1996-934811		19961024		
EP 857060	B1	20020130		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, FI				
CN 1205628	A	19990120	CN	
1996-199329		19961024		
CN 1130196	B	20031210		
BR 9611265	A	19990504	BR	
1996-11265		19961024		
JP 11513700	T2	19991124	JP	
1997-516286		19961024		
IL 124204	A1	20011031	IL	
1996-124204		19961024		
AT 212541	E	20020215	AT	
1996-934811		19961024		
PT 857060	T	20020731	PT	
1996-934811		19961024		
ES 2170274	T3	20020801	ES	
1996-934811		19961024		
RU 2191003	C2	20021020	RU	
1998-109886		19961024		
SK 283664	B6	20031104	SK	
1998-509		19961024		

NO 9801868 A 19980625 NO
 1998-1868 19980424
 US 2001055617 A1 20011227 US
 1998-51918 19980427
 US 2003059468 A1 20030327 US
 2002-141960 20020510
 PRIORITY APPLN. INFO.: DE
 1995-19539574 A 19951025
 1996-EP4627 W 19961024
 1998-51918 A3 19980427
 AB A biol., esp. therapeutic, material is
 stabilized and preserved by prepg.
 a soln. of (1) the material, (2) a
 carbohydrate or a zwitterionic compd.
 with polar residues, and (3) a
 zwitterionic compd. with nonpolar residues,
 and drying the soln. at a temp. above its
 f.p. The process does not
 involve use of elevated temps., can be
 carried out in conventional
 lyophilization app., is energy efficient,
 and is more rapid than freeze
 drying. Thus, a soln. contg. maltose 50,
 L-phenylalanine 10, L-
 arginine 10, polysorbate 80
 0.1, and recombinant human ***G***
 - ***CSF*** 0.35 mg/mL (pH 7.4) was
 sterilized by filtration and 1-mL
 portions were dispensed into 2-mL vials
 fitted with lyophilization
 stoppers and dried isothermally at
 20.degree. and reduced pressure for 48
 h. The product had a residual water
 content of 1.16% and a glass
 transition temp. of 75.degree.. The
 content of native (monomeric)
 G - ***CSF*** was still
 99.83% after 13 wk storage at
 50.degree..

L7 ANSWER 24 OF 30 CAPLUS COPYRIGHT 2004
 ACS on STN
 ACCESSION NUMBER: 1995:615193 CAPLUS
 DOCUMENT NUMBER: 123:25669
 TITLE: Peptides derived from
 hemopoietic growth factors as
 antagonists of the
 growth factors
 INVENTOR(S): Vadas, Mathew
 Alexander; Lopez, Angel Francisco;
 Shannon, Mary Frances
 PATENT ASSIGNEE(S): Medvet Science Pty.
 Ltd., Australia
 SOURCE: PCT Int. Appl., 60
 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 3
 PATENT INFORMATION:

PATENT NO.	KIND	DATE
APPLICATION NO.	DATE	
WO 9504075	A1	19950209
1994-AU432		19940728
W:	AM, AT, AU, BB, BG, BR, BY, CA,	
	CH, CN, CZ, DE, DK, ES, FI, GB,	

GE, HU, JP, KE, KG, KP, KR, KZ,
 LK, LT, LU, LV, MD, MG, MN, MW,
 NL, NO, NZ, PL, PT, RO, RU, SD,
 SE, SI, SK, TJ, TT, UA, US, UZ, VN
 RW: KE, MW, SD, AT, BE, CH, DE, DK,
 ES, FR, GB, GR, IE, IT, LU, MC,
 NL, PT, SE, BF, BJ, CF, CG, CI,
 CM, GA, GN, ML, MR, NE, SN, TD, TG
 CA 2168261 AA 19950209 CA
 1994-2168261 19940728
 AU 9473414 A1 19950228 AU
 1994-73414 19940728
 AU 690128 B2 19980423
 EP 715633 A1 19960612 EP
 1994-922181 19940728
 R: AT, BE, CH, DE, DK, ES, FR, GB,
 GR, IE, IT, LI, LU, MC, NL, PT, SE
 JP 09501154 T2 19970204 JP
 1994-505450 19940728
 US 5939063 A 19990817 US
 1996-591438 19960408
 NZ 329156 A 20000728 NZ
 1997-329156 19971111
 AU 9934974 A1 19990909 AU
 1999-34974 19990611
 PRIORITY APPLN. INFO.: AU
 1993-186 A 19930728
 1994-4772 A 19940330
 1994-AU432 W 19940728
 1996-61153 A3 19960621
 1997-269766 A1 19971111
 AB Modified and variant forms of hemopoietic
 growth factors (HGF) capable of
 acting as antagonists to the
 corresponding native hemopoietic growth
 factors are described for use in
 ameliorating aberrant effects caused by
 the native mols. A modified hemopoietic
 growth factor (HGF) is
 characterized by being in unglycosidated
 form and has an .alpha.-helical
 domain with one or more of any exposed
 acidic amino acids substituted with
 a basic amino acid. The preferred HGF
 are granulocyte-macrophage
 colony-stimulating factor (GM-CSF),
 interleukins (IL)-2, IL-3, IL-4, IL-5,
 IL-6, IL-7, IL-9, IL-10, ***G*** -
 CSF and erythropoietin
 (EPO). The synthesis and biol. activity
 of a no. of such peptides is
 demonstrated.

L7 ANSWER 25 OF 30 CAPLUS COPYRIGHT 2004
 ACS on STN
 ACCESSION NUMBER: 1993:510553 CAPLUS
 DOCUMENT NUMBER: 119:110553
 TITLE: Fusion protein-
 nucleic acid complexes for introduction
 of nucleic acids into
 cells
 INVENTOR(S): Stern, Anne;
 Hagemann, Irene; Ziegler-Landesberger,
 Doris
 PATENT ASSIGNEE(S): Boehringer Mannheim
 G.m.b.H., Germany

SOURCE: Eur. Pat. Appl., 17
PP.

DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE
APPLICATION NO.	DATE	

EP 544292	A2	19930602	EP
1992-120205	19921126		

EP 544292	A3	19930915	
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE			
DE 4139001	A1	19930603	DE
1991-4139001	19911127		
JP 06303987	A2	19941101	JP
1992-318741	19921127		

PRIORITY APPLN. INFO.: DE
1991-4139001 19911127

AB The title fusion protein comprises a protein with affinity for the target cell (e.g., a growth factor, hormone, viral antigen) fused to a polycationic peptide contg. .gtoreq.3 Lys and/or Arg residues. The complex can be used for genetic transformation of target cells. Nerve growth factor and ***granulocyte***
colony -

stimulating ***factor***
fusion proteins were prepd. with Escherichia coli. The NGF fusion protein complexed with DNA was used to transform murine leukemia cell line NFS60.

L7 ANSWER 26 OF 30 CAPLUS COPYRIGHT 2004
ACS on STN

ACCESSION NUMBER: 1993:1980 CAPLUS
DOCUMENT NUMBER: 118:1980
TITLE: Improving the
resolubilization of proteins synthesized
in an heterologous
host and accumulated as inclusion
bodies

INVENTOR(S): Ambrosius, Dorothea;
Dony, Carola; Rudolph, Rainer
PATENT ASSIGNEE(S): Boehringer Mannheim
G.m.b.H., Germany
SOURCE: Eur. Pat. Appl., 18
PP.

DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE
APPLICATION NO.	DATE	

EP 500108	A2	19920826	EP
1992-102864	19920220		

EP 500108	A3	19930407	
EP 500108	B1	19961016	

R: AT, BE, CH, DE, DK, ES, FR, GB,
GR, IT, LI, LU, NL, PT, SE

DE 4105480	A1	19920827	DE
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1991-4105480	19910221		
AU 9210948	A1	19920827	AU

1992-10948	19920214		
AU 641081	B2	19930909	

CA 2061569	AA	19920822	CA
1992-2061569	19920220		

CA 2061569	C	20001024	
FI 9200742	A	19920822	FI

1992-742	19920220		
NO 9200671	A	19920824	NO

1992-671	19920220		
ZA 9201230	A	19921125	ZA

1992-1230	19920220		
JP 05244977	A2	19930924	JP

1992-33257	19920220		
JP 2528232	B2	19960828	

HU 68021	A2	19950404	HU
1992-548	19920220		

HU 214881	B	19980728	
IL 101024	A1	19960618	IL

1992-101024	19920220		
AT 144284	E	19961115	AT

1992-102864	19920220		
ES 2093122	T3	19961216	ES

1992-102864	19920220		
CZ 282744	B6	19970917	CZ

1992-499	19920220		
US 5578710	A	19961126	US

1993-139054 19931021
PRIORITY APPLN. INFO.: DE
1991-4105480 A 19910221

1992-837779 B1 19920214
US

AB The resolubilization of proteins that accumulate as inclusion bodies when synthesized in an heterologous host is made more efficient by synthesizing the protein with an N- or C-terminal addn. of a hydrophilic peptide of 5-20 amino acids. The peptide is made up of amino acids with a neg. relative hydrophobicity such as Cys, Ser, Gln, Lys, Arg, or Pro. A series of peptides for addn. to the N-terminus of a protein were designed and oligonucleotides encoding them were introduced at the 5'-end of a sequence encoding ***granulocyte***
colony - ***stimulating***

factor (***G*** - ***CSF***) and the genes expressed in Escherichia coli. Inclusion bodies were prepd., and solubilized in concd. guanidine. hydrochloride and renatured in an ***arginine*** -based buffer by methods of the prior art. Recovery of ***G*** - ***CSF*** was measured by an in vitro test with a ***G*** - ***CSF***

-dependent cell line. After optimization of renaturation conditions, recoveries of .gtoreq.80% of the biol. activity could be found with longer, more hydrophobic, peptides having greater effects than shorter ones with two adjacent glutamate residues having a significant effect.

L7 ANSWER 27 OF 30 CAPLUS COPYRIGHT 2004
ACS on STN

ACCESSION NUMBER: 1991:445253 CAPLUS
DOCUMENT NUMBER: 115:45253
TITLE: Imaging tissue sites
of inflammation
INVENTOR(S): Morgan, A. Charles,
Jr.; Anderson, David C.
PATENT ASSIGNEE(S): NeoRx Corp., USA
SOURCE: PCT Int. Appl., 73
PP.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	
APPLICATION NO.	DATE		
WO 9010463	A1	19900920	WO
1990-US1399	19900314		
W: CA, JP			
RW: AT, BE, CH, DE, DK, ES, FR, GB, IT, LU, NL, SE			
US 4986979	A	19910122	US
1989-364687	19890609		
CA 2055431	AA	19900915	CA
1990-2055431	19900314		
EP 463116	A1	19920102	EP
1990-906490	19900314		
R: AT, BE, DE, DK, FR, GB, IT, LU, NL, SE			
JP 04504129	T2	19920723	JP
1990-506097	19900314		
US 5376356	A	19941227	US
1991-726894	19910708		
PRIORITY APPLN. INFO.:			US
1989-324285	19890314		US
1989-364687	19890609		WO
1990-US1399	19900314		
OTHER SOURCE(S):	MARPAT 115:45253		
AB The site of tissue inflammation is imaged by infusing into a patient labeled (and unlabeled) recognition agent capable of interacting selectively with activated leukocytes accumulated at the site and imaging the tissue site. The recognition agent is, e.g., a monoclonal antibody or fragment directed against a leukocyte activation marker or a complement receptor or component, a chemotactic peptide, leukotriene, eosinophilic peptide, etc., and is labeled with ¹¹¹ In or ^{99m} Tc.			

L7 ANSWER 28 OF 30 CAPLUS COPYRIGHT 2004
ACS on STN
ACCESSION NUMBER: 1990:401547 CAPLUS
DOCUMENT NUMBER: 113:1547
TITLE: Site-specific
homogeneous modification of polypeptides
to facilitate
covalent linkages to a hydrophilic
moiety
INVENTOR(S): Shaw, Gray
PATENT ASSIGNEE(S): Genetics Institute,

SOURCE: PCT Int. Appl., 37
PP.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	
APPLICATION NO.	DATE		
WO 8905824	A1	19890629	WO
1988-US4633	19881222		
W: AU, JP			
RW: AT, BE, CH, DE, FR, GB, IT, LU, NL, SE			
US 4904584	A	19900227	US
1987-137043	19871223		
AU 8929111	A1	19890719	AU
1989-29111	19881222		
EP 355142	A1	19900228	EP
1989-901043	19881222		
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE			
JP 02502646	T2	19900823	JP
1989-500925	19881222		
PRIORITY APPLN. INFO.:			US
1987-137043	19871223		WO
1988-US4633	19881222		
AB To improve the homogeneity of chem. modification of a protein by a hydrophilic moiety e.g. polyethylene glycol, the no. of potentially reactive ***lysines*** on the surface of the protein is changed by site-directed mutagenesis of the cloned gene. ***Lysines*** are substituted with or for ***arginine*** as necessary. An Arg16, Arg34, Lys147 deriv. of ***granulocyte*** ***colony*** ***stimulating*** ***factor*** was prep'd. by oligonucleotide- directed site-specific mutagenesis of the cloned gene in the plasmid pXMT2G-CSF. After expression of the altered gene in animal cells the protein may be conjugated with polyethylene glycol by std. methods.			

L7 ANSWER 29 OF 30 WPIDS COPYRIGHT 2004
THOMSON DERWENT on STN DUPLICATE 5
ACCESSION NUMBER: 1988-209830 [30] WPIDS
DOC. NO. CPI: C1988-093776
TITLE: Stable
granulocyte - ***colony***
stimulating
factor prepn. - contg. e.g.
aminoacid, as
stabiliser, accelerates growth and
differentiation of
neutrophile.
DERWENT CLASS: B04 D16
PATENT ASSIGNEE(S): (CHUS) CHUGAI PHARM CO
LTD
COUNTRY COUNT: 1
PATENT INFORMATION:

LA	PATENT NO PG	KIND	DATE	WEEK
6	JP 63146829	A	19880618 (198830)*	
5	JP 2577744	B2	19970205 (199710)	

APPLICATION DETAILS:

PATENT NO APPLICATION	KIND DATE	
JP 63146829	A	JP
1987-178035	19870716	
JP 2577744	B2	JP
1987-178035	19870716	

FILING DETAILS:

PATENT NO	KIND	
JP 2577744	B2 Previous Publ.	JP
63146829		

PRIORITY APPLN. INFO: JP 1986-169490
19860718; JP

19870716
AN 1988-209830 [30] WPIDS
AB JP 63146829 A UPAB: 19930923
A stable ***granulocyte*** -
colony ***stimulating***
factor prepn. contains
granulocyte - ***colony***
stimulating ***factor*** (
G - ***CSF***) and one
stabiliser selected from pharmaceutically
permissible amino acid, S-contg.
reducing agents and antioxidants.
Usable ***G*** - ***CSF*** is
one purified from culture of
G - ***CSF*** producing cells
or one produced by recombinant DNA
techniques. Usable amino acids are
glycine, threonine, tryptophan,
lysine, hydroxylysine,
histidine, ***arginine***, cysteine,
cystine, and methionine. Usable S-contg.
reducing agents are
N-acetylcysteine, N-acetylhomocysteine,
thioctic acid, thiodiglycol
thioethanolamine, thioglycerol,
thiosorbitol, thioglycolic acid, sodium
thiosulphate, sodium bisulphite, sodium
pyrosulphite, sodium sulphite,
thiolactic acid, dithiothreitol,
glutathione, etc.. Usable antioxidants
are erisorbic acid,
dibutylhydroxytoluene, butylhydroxyannisol,
dl-alpha-tocopherol, L-ascorbic acid,
EDTA, triamyl gallate, etc.. Pref.
amt. of stabiliser is 1-10,000 wt. parts
for 1 wt. part of ***G*** -
CSF.
USE/ADVANTAGE - ***G*** -
CSF accelerates growth and

differentiation of neutrophile and is
useful for infectious diseases.
G - ***CSF*** is effective at
a dose of 0.1 - 500 microg.
However, ***G*** - ***CSF*** is
easily adsorbed to walls of
injection ampoules and its activity is
easily decreased by factors such as
temp, humidity, oxygen and UV. This
prepn. solves these problems and loss
of expensive ***G*** - ***CSF***
during storage is avoided. In
addn., administration of precise amt. of
G - ***CSF*** becomes
possible.
0/0

L7 ANSWER 30 OF 30 CAPLUS COPYRIGHT 2004
ACS on STN
ACCESSION NUMBER: 1988:217269 CAPLUS
DOCUMENT NUMBER: 108:217269
TITLE: High-yield expression
of modified human
granulocyte
colony -
stimulating
factor gene in yeast and
Escherichia coli
INVENTOR(S): Cerretti, Douglas
Pat; Cosman, David John; Gillis,
Stephen; Mochizuki,
Diane Yukiko; March, Carl Jack;
Price, Virginia Lee;
Tushinski, Robert J.; Urdal,
David Lloyd
PATENT ASSIGNEE(S): Immunex Corp., USA
SOURCE: Eur. Pat. Appl., 38
pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	
EP 243153	A2	19871028	EP
1987-303509	19870422		
EP 243153	A3	19880113	
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE			
ZA 8702705	A	19871230	ZA
1987-2705	19870415		
DK 8702031	A	19871023	DK
1987-2031	19870421		
JP 63000299	A2	19880105	JP
1987-98465	19870421		
AU 8771844	A1	19871029	AU
1987-71844	19870422		
AU 601727	B2	19900920	
PRIORITY APPLN. INFO.:			US
1986-856643	19860422		
			US
1986-931458	19861114		
AB Human ***granulocyte*** ***colony*** - ***stimulating*** ***factor*** (hG-CSF) derivs. are recombinantly produced in high yields			

in yeast and Escherichia coli hosts. Plasmid pBC102.K22 was constructed contg. a site-specifically mutagenized hG-CSF gene (having the codon for ***arginine*** at position 22 replaced with that for ***lysine*** such that a KEX2 protease-sensitive site is eliminated) linked at the 5'-end via a KEX2 recognition site to an .alpha.-factor leader sequence and a sequence encoding an antigenic peptide capable of cleavage by bovine enterokinase. Yeast transformed with pBC102.K22 showed 5-fold higher expression than yeast transformed with vector contg. native hG-CSF protein gene.

=> D IBIB ABS L8 1-12

L8 ANSWER 1 OF 12 MEDLINE on STN
 ACCESSION NUMBER: 2004017822 MEDLINE
 DOCUMENT NUMBER: PubMed ID: 14715517
 TITLE: Induced nitric oxide promotes intestinal inflammation following hemorrhagic shock.
 AUTHOR: Hierholzer Christian; Kalff Jorg C; Billiar Timothy R; Bauer Anthony J; Tweardy David J; Harbrecht Brian G
 CORPORATE SOURCE: Department of Surgery, University of Pittsburgh Medical Center, F1264-200 Lothrop St., Pittsburgh, PA 15213, USA.
 CONTRACT NUMBER: GM-44100 (NIGMS) GM-55664 (NIGMS) P50-GM-53789 (NIGMS)
 SOURCE: American journal of physiology. Gastrointestinal and liver physiology, (2004 Feb) 286 (2) G225-33.
 Journal code: 100901227.
 ISSN: 0193-1857.
 PUB. COUNTRY: United States
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
 LANGUAGE: English
 FILE SEGMENT: Priority Journals
 ENTRY MONTH: 200403
 ENTRY DATE: Entered STN: 20040113
 Last Updated on STN: 20040304

Entered Medline: 20040303
 AB In hemorrhagic shock (HS), increased cytokine production contributes to tissue inflammation and injury through the recruitment of neutrophils [polymorphonuclear cells (PMN)]. HS stimulates the early expression of inducible nitric oxide synthase (iNOS) that modulates proinflammatory activation after hemorrhage. Experiments were performed to determine the contribution of iNOS to gut inflammation and dysmotility after HS. Rats subjected to HS (mean arterial pressure 40 mmHg for 2.5 h followed by resuscitation and death at 4 h) demonstrated histological signs of mucosal

injury, impairment of intestinal smooth muscle contractility, extravasation of PMN, and increased gut mRNA levels of ICAM-1, IL-6, and ***granulocyte*** ***colony*** - ***stimulating*** ***factor*** (***G*** - ***CSF***). In addition, DNA binding activity of NF-kappaB and Stat3, an IL-6 signaling intermediate, was significantly increased. In shocked rats treated with the selective iNOS inhibitor 1-N(6)-(1-iminoethyl) ***lysine*** at the time of resuscitation, histological signs of intestinal injury and PMN infiltration were reduced and muscle contractility was almost completely restored. Selective iNOS inhibition in shocked animals reduced the binding activity of NF-kappaB and Stat3 and reduced mRNA levels of ICAM-1, IL-6, and ***G*** - ***CSF*** . The results of studies using iNOS knockout mice subjected to HS were similar. We propose that early upregulation of iNOS contributes to the inflammatory response in the gut wall and participates in the activation of signaling cascades and cytokine expression that regulate intestinal injury, PMN recruitment, and impaired gut motility.

L8 ANSWER 2 OF 12 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
 ACCESSION NUMBER: 2003-421352 [39] WPIDS
 DOC. NO. CPI: C2003-110999
 TITLE: Preparation of spray-dried, drug-containing particles useful for pulmonary delivery of drug and for treating disease involves modulating the charge density of the particles.
 DERWENT CLASS: B04 B07 D16
 INVENTOR(S): LEHRMAN, S R; STEVENSON, C; YANG, B
 PATENT ASSIGNEE(S): (INHA-N) INHALE THERAPEUTIC SYSTEMS INC
 COUNTRY COUNT: 101
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK
LA PG			
WO 2003035028	A1	20030501	(200339)* EN
RW: AT BE BG CH CY CZ DE DK EA EE ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SK SL SZ TR TZ UG ZM ZW			
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW			

APPLICATION DETAILS:

PATENT NO APPLICATION	KIND DATE	
WO 2003035028	A1	WO
2002-US33016	20021016	

PRIORITY APPLN. INFO: US 2001-330073P
20011019

AN 2003-421352 [39] WPIDS
AB WO2003035028 A UPAB: 20030619
NOVELTY - Preparation (M) of spray-dried,
drug containing particles
comprising combining an aqueous solution
with a drug and an optional
excipient, and spray drying the solution
to form the spray-dried,
drug-containing particles, is new.

DETAILED DESCRIPTION - In M, the
aqueous solution has a pH that is
different from the effective pI of the
combination of the drug and the
excipient. The net charge is associated
with the drug and optional

excipient as a result of an absolute
difference between the pH and the pI.

ACTIVITY - None given.

MECHANISM OF ACTION - None given.

USE - M is useful for producing
spray-dried, drug-containing
particles; in the treatment of disease
(claimed) useful for pulmonary
delivery of drug.

ADVANTAGE - The formulation is
stable and the dispersibility of the
formulation can be maintained over 12-
weeks; exhibits a drop in emitted
dose of not more than 25% over 12-weeks;
has moisture content of 6 wt.%.

The mass median aerodynamic diameter
(MMAD) of the spray-dried
drug-containing particles is 0.1 - 5 μ m.
The bulk density of the
formulation is 0.1 - 2 g/cm³. The method
improves, maintains and optimizes
the dispersibility of the particles. The
formulation shows improvement in
aerosol properties, thus reducing costly
drug losses to the inhalation
device; reducing the amount administered
due to high aerosolization
efficiency, and reducing the number of
inhalations per day by increasing
the amount of aerosolized drug that
reaches the lungs of the patient.

Dwg.0/0

L8 ANSWER 3 OF 12 WPIDS COPYRIGHT 2004
THOMSON DERWENT on STN
ACCESSION NUMBER: 2002-415697 [44] WPIDS
CROSS REFERENCE: 2002-404689 [43]; 2002-
425749 [45]; 2002-527345 [56]
DOC. NO. CPI: C2002-117304
TITLE: New synthetic protein,
useful for inducing erythropoiesis
or apoptosis or reducing
inflammation, comprising

pseudoamino acid residue
with a ribosomally-specified
amino acid sidechain
attached to thiol.

DERWENT CLASS: B04
INVENTOR(S): BOTTI, P; BRADBURNE, J
A; CHEN, S; CRESSMAN, S; HUNTER, C
L; KENT, S B H;
KOCHENDOERFER, G; LOW, D W;
KOCHENDOERFER, G G;
WILKEN, J G
PATENT ASSIGNEE(S): (GRYP-N) GRYPHON SCI;
(GRYP-N) GRYPHON THERAPEUTICS INC;
(BOTT-I) BOTTI P; (BRAD-
I) BRADBURNE J A; (CHEN-I) CHEN
S; (CRES-I) CRESSMAN S;
(HUNT-I) HUNTER C L; (KENT-I)
KENT S B H; (KOCH-I)
KOCHENDOERFER G G; (LOWD-I) LOW D W
COUNTRY COUNT: 84
PATENT INFORMATION:

PATENT NO LA PG	KIND DATE	WEEK
WO 2002020034	A1 20020314	(200244)* EN
110		
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW W: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW AU 2001073388 A 20020322 (200251) EP 1315513 A2 20030604 (200337) EN R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR NO 2003001047 A 20030508 (200343) NO 2003001048 A 20030508 (200343) NO 2003001049 A 20030508 (200343) KR 2003046411 A 20030612 (200370) US 2003208046 A1 20031106 (200374) KR 2003057529 A 20030704 (200377) KR 2003061784 A 20030722 (200381) CN 1457257 A 20031119 (200412) ZA 2003000315 A 20040331 (200426)		
114		

APPLICATION DETAILS:

PATENT NO APPLICATION	KIND DATE	
WO 2002020034	A1	WO
2001-US21935	20010712	
AU 2001073388	A	AU
2001-73388	20010712	
EP 1315513	A2	EP
2001-952657	20010712	
		WO
2001-US21935	20010712	
NO 2003001047	A	WO
2001-US21930	20010712	

2003-1047	20030306	NO
NO 2003001048	A	WO
2001-US21935	20010712	NO
2003-1048	20030306	WO
NO 2003001049	A	NO
2001-US21928	20010712	WO
2003-1049	20030306	NO
KR 2003046411	A	KR
2003-702085	20030213	WO
US 2003208046	A1	US
2001-US21935	20010712	US
2003-332386	20030108	KR
KR 2003057529	A	KR
2003-702774	20030226	KR
KR 2003061784	A	CN
2003-702773	20030226	ZA
CN 1457257	A	
2001-815290	20010712	
ZA 2003000315	A	
2003-315	20030113	

FILING DETAILS:

PATENT NO	KIND	
PATENT NO		

AU 2001073388	A Based on	WO
2002020034		
EP 1315513	A2 Based on	WO
2002020034		

PRIORITY APPLN. INFO: US 2000-236377P
20000929; US

20000908; US 2000-231339P

20000908; US

20030108

AN 2002-415697 [44] WPIDS
CR 2002-404689 [43]; 2002-425749 [45]; 2002-527345 [56]
AB WO 200220034 A UPAB: 20040421
NOVELTY - Synthetic protein (I) containing a pseudo-amino acid (paa) residue in which the sidechain residue is -S_{Ra}, where R_a is an optionally substituted terminal portion (or its ***analog***) of a ribosomally-specified amino acid (raa) side chain.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:
(1) Treatment of human diseases by administering at least one (I), of monomer molecular weight over 25 kD, that mimics the biological activity of a ribosomally specified, bioactive human protein receptor (or fragment), protein receptor ligand (or fragment), or a cytokine;
(2) A method, designated 'pseudo-native chemical ligation', for synthesizing a polypeptide of formula (Ia); and
(3) A polypeptide of formula (Ia).
Q and W = one or more additional amino acids (aa);

aaN and aaC = N- and C-terminal aa; and
aax and aay = internal aa with sidechains x and y.
ACTIVITY - Erythropoietic; Antiinflammatory; Angiogenic; Cytostatic.
A modified form of human erythropoietin (EPO) containing S-carboxymethylated Cys at position 89 had in vitro ED50 in human UT-7 (megakaryocytic leukemia) cells of 1570 pM; compare 32.5 pM for recombinant human EPO.
MECHANISM OF ACTION - None given.
USE - (I), which have the activity of protein receptors, or their ligands, or of cytokines, are useful in human medicine, e.g. for inducing erythropoiesis; inducing or reducing inflammation; initiating angiogenesis or vascularization; inducing apoptosis and modulating the cell cycle.
ADVANTAGE - (I) can be produced by a chemical ligation method that:
(1) is applicable to a wide variety of amino acid residues, (poly)peptides and other polymers;
(2) uses an easily removed thiol-containing auxiliary; and
(3) connects molecules through a native amide bond. Selected polymers can be attached at user-defined positions through selected types of bonds.
Selected polymers can be attached at user-defined positions through selected types of bonds. Compared with native proteins, (I) may be more stable or have different specificities for substrates, inhibitors, receptors, ligands etc.
Dwg.0/7

L8 ANSWER 4 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2002:353487 CAPLUS
DOCUMENT NUMBER: 136:364900
TITLE: Construction, cloning, recombinant expression and therapeutic use of single-chain dimeric ***granulocyte***
colony - ***stimulating***
factor and other single-chain multimeric protein conjugates
INVENTOR(S): Nissen, Torben Lauesgaard; Jensen, Anne Dam
PATENT ASSIGNEE(S): Maxygen Aps, Den.; Maxygen Holdings Ltd.
SOURCE: PCT Int. Appl., 108 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE
APPLICATION NO.	DATE	

WO 2002036626 A1 20020510 WO
 2001-DK724 20011101
 W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
 RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG
 AU 2002012108 A5 20020515 AU
 2002-12108 20011101
 US 2002142964 A1 20021003 US
 2001-3496 20011101
 EP 1334127 A1 20030813 EP
 2001-980207 20011101
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR
 PRIORITY APPLN. INFO.: DK
 2000-1647 A 20001102 US
 2000-245727P P 20001102 WO
 2001-DK724 W 20011101
 AB The invention relates to single-chain multimeric polypeptides comprising at least two units of a monomeric polypeptide linked via a peptide bond or a peptide linker, wherein the monomeric polypeptide is of a type that is biol. active in monomeric form, and to polypeptide conjugates having at least one non-polypeptide moiety covalently bound to an attachment group of the polypeptide. The polypeptide is preferably a ***granulocyte***
 colony - ***stimulating***
 factor (***G*** -
 CSF) dimer bound to a polymer mol., preferably to one or more polyethylene glycol (PEG) mols. Construction and cloning of a synthetic gene encoding single-chain ***G*** -
 CSF dimer, expression of the single-chain ***G*** - ***CSF*** dimer in *Saccharomyces cerevisiae* and in CHO cells, purifn. of the recombinant single-chain ***G*** - ***CSF*** dimers from yeast and CHO cells, and covalent attachment of SPA-PEG to the purified single-chain ***G*** - ***CSF*** dimers are described. In vitro biol. activity of non-conjugated and conjugated single-chain ***G*** - ***CSF*** dimers, and in vivo

activity of the single-chain ***G*** -
 CSF dimers in healthy rats and in rats with chemotherapy-induced neutropenia are reported.

REFERENCE COUNT: 9 THERE ARE 9
 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL
 CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 5 OF 12 WPIDS COPYRIGHT 2004
 THOMSON DERWENT on STN
 ACCESSION NUMBER: 2002-075094 [10] WPIDS
 DOC. NO. CPI: C2002-022327
 TITLE: Protein conjugates that selectively target certain tissues and organs useful for treating and preventing various diseases, comprises glucose-aminoglycan-targeting domain conjugated to a therapeutic protein.
 DERWENT CLASS: B04 D16
 INVENTOR(S): SEREDA, T J; WIEBE, D J; WILLIAMS, A M; WOLOSKI, B M R
 PATENT ASSIGNEE(S): (CANG-N) CANGENE CORP; (SERE-I) SEREDA T J; (WIEB-I) WIEBE D J; (WILL-I) WILLIAMS A M; (WOLO-I) WOLOSKI B M R
 COUNTRY COUNT: 96
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK
LA PG			
WO 2001080899	A2	20011101	(200210)* EN
121			
RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW			
W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW			
AU 2001050212	A	20011107	(200219)
EP 1274461	A2	20030115	(200306) EN
R: AL AT BE CH CY DE DK ES FI FR GB GR IE IT LI LT LU LV MC MK NL PT RO SE SI TR			
US 2004037834	A1	20040226	(200416)

APPLICATION DETAILS:

PATENT NO	KIND	DATE	
APPLICATION			
WO 2001080899	A2		WO
2001-CA533		20010420	
AU 2001050212	A		AU
2001-50212		20010420	
EP 1274461	A2		EP
2001-923439		20010420	
			WO
2001-CA533		20010420	
US 2004037834	A1		WO
2001-CA533		20010420	

2003-257377 20030610 US

FILING DETAILS:

PATENT NO	KIND
AU 2001050212	A Based on
2001080899	
EP 1274461	A2 Based on
2001080899	

PRIORITY APPLN. INFO: US 2000-198613P
20000420; US

2003-257377

20030610

AN 2002-075094 [10] WPIDS

AB WO 200180899 A UPAB: 20020213

NOVELTY - A conjugate (I) comprising an hyaluronic acid (HA)-binding protein (HABP1) or peptide (HABP2) contiguous with, or coupled to a polypeptide conjugated to a therapeutic agent, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) an isolated and purified nucleic acid sequence (II) encoding an HABP1 or peptide in sequence with a therapeutic agent;

(2) preparation (M1) of (I) by inserting a first nucleotide sequence encoding a HABP1 directly linked to a second nucleotide sequence encoding a therapeutic protein into a suitable vector, expressing the vector in an acceptable host, purifying conjugate molecule from host or expression medium;

(3) preparing a pharmaceutical for treating an animal in need of treatment, comprising the preparation of (I) and suspending (I) in a carrier, diluent or excipient;

(4) pharmaceutical composition (III) comprising (I).

ACTIVITY - Immunosuppressive; cytostatic.

MECHANISM OF ACTION - Gene therapy.

USE - (I) is useful for altering in vivo the distribution of a therapeutic agent comprising administering (I) to the animal where conjugate molecule will distribute primarily in tissues and organs containing high levels of endogenous HA; and for treating mammal with a disorder where a diseased tissue of the mammal contains high level of HA (claimed).

ADVANTAGE - Lower therapeutic dosages required also translates into lower immunogenicity of the conjugated protein as compared to the native protein. As a result, conjugates improves patient compliance and reduce direct and indirect costs associated with the drug substance and its

administration. Conjugates allows for the use, where appropriate, of lower, safer, dosages as compared to the conventional dosage requirements for the unconjugated corresponding therapeutic agent. Conjugate molecules has an increased half-life and potency, resulting in prolonged circulation of the molecule, efficient distribution into the target tissues, and increased bioavailability.

Dwg.0/0

L8 ANSWER 6 OF 12 CAPLUS COPYRIGHT 2004

ACS on STN

ACCESSION NUMBER: 1995:615193 CAPLUS

DOCUMENT NUMBER: 123:25669

TITLE: Peptides derived from hemopoietic growth factors as antagonists of the growth factors

INVENTOR(S): Vadas, Mathew Alexander; Lopez, Angel Francisco; Shannon, Mary Frances

PATENT ASSIGNEE(S): Medvet Science Pty. Ltd., Australia

SOURCE: PCT Int. Appl., 60 PP.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE
APPLICATION NO.	DATE	
WO 9504075	A1	19950209
1994-AU432		19940728
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LT, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ, VN		
RW: KE, MW, SD, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG		
CA 2168261	AA	19950209
1994-2168261		19940728
AU 9473414	A1	19950228
1994-73414		19940728
AU 690128	B2	19980423
EP 715633	A1	19960612
1994-922181		19940728
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE		
JP 09501154	T2	19970204
1994-505450		19940728
US 5939063	A	19990817
1996-591438		19960408
NZ 329156	A	20000728
1997-329156		19971111
AU 9934974	A1	19990909
1999-34974		19990611
PRIORITY APPLN. INFO.: 1993-186	A	19930728
1994-4772	A	19940330

1994-AU432 W 19940728 WO
 1996-61153 A3 19960621 AU
 1997-269766 A1 19971111 NZ
 AB Modified and variant forms of hemopoietic growth factors (HGF) capable of acting as antagonists to the corresponding native hemopoietic growth factors are described for use in ameliorating aberrant effects caused by the native mols. A modified hemopoietic growth factor (HGF) is characterized by being in unglycosidated form and has an .alpha.-helical domain with one or more of any exposed acidic amino acids substituted with a basic amino acid. The preferred HGF are granulocyte-macrophage colony-stimulating factor (GM-CSF), interleukins (IL)-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-9, IL-10, ***G*** - ***CSF*** and erythropoietin (EPO). The synthesis and biol. activity of a no. of such peptides is demonstrated.

L8 ANSWER 7 OF 12 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
 ACCESSION NUMBER: 1995-022474 [03] WPIDS
 DOC. NO. CPI: C1995-010374
 TITLE: New polymer complexes of biologically active peptide(s) or proteins - are used to amplify delivery of the active agent using the vitamin B12 uptake system.
 DERWENT CLASS: A96 B04 B05
 INVENTOR(S): GOULD, A R; MCINERNEY, B V; RUSSELL-JONES, G J; WESTWOOD, S W; RUSSELL, J G J
 PATENT ASSIGNEE(S): (BIOT-N) BIOTECH
 AUSTRALIA PTY LTD
 COUNTRY COUNT: 57
 PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK
LA PG			
WO 9427641	A1	19941208 (199503)* EN	
37			
LU MC NL OA PT SE			
DK ES FI GB GE HU JP KG KP KR KZ			
PT RO RU SD SE SI SK TJ TT UA US			
UZ VN			
AU 9467903	A	19941220 (199512)	
US 5449720	A	19950912 (199542)	
10			
ZA 9403599	A	19960131 (199610)	
34			
BR 9406725	A	19960206 (199612)	
EP 701448	A1	19960320 (199616) EN	
LI LU MC NL PT SE			
CZ 9503083	A3	19960417 (199623)	

67 JP 08510261 W 19961029 (199705)
 EP 701448 A4 19970102 (199721)
 CN 1126441 A 19960710 (199749)
 HU 75058 T 19970328 (199750)
 SG 46223 A1 19980220 (199821)
 AU 706723 B 19990624 (199936)
 IL 109745 A 20000131 (200015)
 RU 2139732 C1 19991020 (200039)
 EP 701448 B1 20020814 (200255) EN
 R: AT BE CH DE DK ES FR GB GR IE IT
 LI LU MC NL PT SE SI
 DE 69431185 E 20020919 (200269)

APPLICATION DETAILS:

PATENT NO	KIND	DATE	
WO 9427641	A1		WO
1994-AU273		19940524	
AU 9467903	A		AU
1994-67903		19940524	
1994-AU273		19940524	WO
US 5449720	A		US
1993-64892		19930524	
ZA 9403599	A		ZA
1994-3599		19940524	
BR 9406725	A		BR
1994-6725		19940524	
1994-AU273		19940524	WO
EP 701448	A1		EP
1994-916096		19940524	
1994-AU273		19940524	WO
CZ 9503083	A3		CZ
1995-3083		19940524	
JP 08510261	W		WO
1994-AU273		19940524	JP
1995-500022		19940524	
EP 701448	A4		EP
1994-916096			
CN 1126441	A		CN
1994-192682		19940524	
HU 75058	T		WO
1994-AU273		19940524	
1995-3343		19940524	HU
SG 46223	A1		SG
1996-1166		19940524	
AU 706723	B		AU
1994-67903		19940524	
IL 109745	A		IL
1994-109745		19940524	
RU 2139732	C1		WO
1994-AU273		19940524	
1995-122664		19940524	RU
EP 701448	B1		EP
1994-916096		19940524	
1994-AU273		19940524	WO
DE 69431185	E		DE
1994-631185		19940524	
1994-916096		19940524	EP

1994-AU273 19940524 WO

FILING DETAILS:

PATENT NO	KIND	
AU 9467903	A	Based on WO
9427641		
BR 9406725	A	Based on WO
9427641		
EP 701448	A1	Based on WO
9427641		
JP 08510261	W	Based on WO
9427641		
HU 75058	T	Based on WO
9427641		
AU 706723	B	Previous Publ. AU
9467903		
		Based on WO
9427641		
RU 2139732	C1	Based on WO
9427641		
EP 701448	B1	Based on WO
9427641		
DE 69431185	E	Based on EP
701448		
		Based on WO
9427641		

PRIORITY APPLN. INFO: US 1993-64892
19930524

AN 1995-022474 [03] WPIDS

AB WO 9427641 A UPAB: 19950126

Complexes of formula (V-Q)n-P-(Q1-A)m (I) are new, in which V = a carrier which will bind to natural intrinsic factor selected from vitamin B12 or an analogue of this; n = the molar substitution ratio of V in the complex, and is 1.0-10; P = a polymer; A = a pharmaceutically active substance; m = the molar substitution ratio of A in the complex, and is a no. greater than 1.0 up to 1000; Q, Q1 = a covalent bond, or a spacer cpd. linking V, P and A by covalent bonds.

USE - The complexes can be used for delivery of peptide or protein pharmaceuticals using the VB12 uptake system. Admin. is oral, parenteral, transdermal, vaginal, anal, etc..

Dwg.0/0

ABEQ US 5449720 A UPAB: 19951026

Vitamin B12 or ***analog*** complex of formula (I) (V-Q)n-P-(Q1-A)m is new. In (I) V is carrier which will bind to natural intrinsic factor (IF) consisting of vitamin B12 or ***analog*** or deriv.; n is molar substitution ratio of V in complex and is 1.0-10(1.0-1.2); P is pharmaceutically-acceptable polymer; A is active cpd. (polypeptide or protein); m is molar substitution ratio of A in complex and is greater than 1.0 to 1000 (10-100); Q and Q' are covalent bond or spacer cpd. pref. at least one Q is a biodegradable spacer.

Pref. biodegradable portion is disulphide bond, ester linkage, glutamyl- ***lysine*** linkage, or diazo bond. Polymers include polysaccharides, chondroitin sulphate, poly(n-(2-hydroxypropyl)-methacrylamide), styrene-maleic acid anhydride copolymers, water-soluble, polyurethanes, etc. Q and Q' include opt. subst. opt. satd. 1-50C alkylene, cycloalkylene or aromatic with chain C's opt. replaced by N, O or S and opt. subst. Pref. spacer is thio-cleavable.

Polypeptides include hormones, growth factors, interleukin, ***GCSF***, EPO, LHRH, and interferon. (I) is produced by reacting A with P to intermediate which is reacted with V, or V with P, then with A.

USE/ADVANTAGE - Complex amplifies the uptake of the drugs via the VB12 uptake system for adequate oral admin. using only small amt. expensive pharmaceuticals.

Dwg.0/0

L8 ANSWER 8 OF 12 SCISEARCH COPYRIGHT 2004
THOMSON ISI on STN DUPLICATE 1
ACCESSION NUMBER: 92:347820 SCISEARCH
THE GENUINE ARTICLE: HX055
TITLE: CONSTRUCTION OF PROTEIN
ANALOGS BY SITE-SPECIFIC
CONDENSATION OF
UNPROTECTED FRAGMENTS

AUTHOR: GAERTNER H F (Reprint);
ROSE K; COTTON R; TIMMS D; CAMBLE
R; OFFORD R E

CORPORATE SOURCE: UNIV GENEVA, CTR MED,
DEPT BIOCHIM MED, CTR 1 RUE MICHEL
SERVET, CH-1211 GENEVA 4,
SWITZERLAND (Reprint); ICI
PHARMACEUT PLC,
MACCLESFIELD, CHESHIRE, ENGLAND
COUNTRY OF AUTHOR: SWITZERLAND; ENGLAND
SOURCE: BIOCONJUGATE CHEMISTRY,
(MAY/JUN 1992) Vol. 3, No. 3, pp.
262-268.
ISSN: 1043-1802.

DOCUMENT TYPE: Article; Journal
FILE SEGMENT: LIFE
LANGUAGE: ENGLISH
REFERENCE COUNT: 34

*ABSTRACT IS AVAILABLE IN
THE ALL AND IALL FORMATS*

AB The extreme sensitivity to periodate of 1-amino, 2-hydroxy compounds permits the selective conversion of N-terminal serine and threonine to an aldehydic group. We have used this reaction to construct analogues of human ***granulocyte***
colony ***stimulating***
factor (***G*** - ***CSF***) by allowing such oxidized peptides to react with others that have had a hydrazide derivative attached to the C-terminus by reversed proteolysis. Two recombinant analogues of ***G*** - ***CSF*** were used as starting materials.

Both had only a single ***lysine*** residue (at position 62 and 75, respectively) followed immediately by a serine. Digestion of each analogue by the ***lysine*** -specific protease from *Achromobacter lyticus* gave two fragments, one of which could be N-terminally oxidized and the other converted to the C-terminal hydrazide derivative by reversed proteolysis using the same enzyme. After preliminary studies with model peptides, we first reacted the corresponding peptide pairs together and then, in order to eliminate the 64-74 disulfide loop, fragment 1-62 from the first analogue with fragment 76-174 from the second. Reactions are efficient (up to 80 % product based on the oxidized fragment) and take place under very mild conditions. The hydrazone bond can easily be stabilized by reduction with NaBH₃CN. This method represents a new, reasonably general route for the construction of large protein chimeras of precisely controlled structure.

L8 ANSWER 9 OF 12 MEDLINE on STN
 ACCESSION NUMBER: 91153899 MEDLINE
 DOCUMENT NUMBER: PubMed ID: 1705535
 TITLE: Muroctasin [MDP-Lys(18)] augments the production of ***granulocyte***
 colony - ***stimulating***
 factor (***G*** - ***CSF***) from human peripheral blood mononuclear cells in vitro.
 AUTHOR: Shimoda K; Okamura S; Kawasaki C; Omori F; Matsuguchi T; Niho Y
 CORPORATE SOURCE: Cancer Center, Faculty of Medicine, Kyushu University, Fukuoka, Japan.
 SOURCE: International journal of immunopharmacology, (1990) 12 (7) 729-36.
 Journal code: 7904799.
 ISSN: 0192-0561.
 PUB. COUNTRY: ENGLAND: United Kingdom
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
 LANGUAGE: English
 FILE SEGMENT: Priority Journals
 ENTRY MONTH: 199104
 ENTRY DATE: Entered STN: 19910428
 Last Updated on STN: 19960129

Entered Medline: 19910408
 AB N2-[(N-acetylmuramoyl)-L-alanyl-D-isoglutaminyl]-N6-stearoyl-L-***lysine*** (MDP-Lys(L18)), muroctasin is an immunopotentiating substance. Neutrophilia and elevated levels of colony-stimulating factor (CSF) in peripheral blood were previously found after the administration of this compound in both mice and humans. To specify the type of CSF and

to elucidate the mechanisms of the neutrophilia, we cultured human peripheral blood mononuclear cells (PBMC) in the presence of muroctasin and measured the levels of granulocyte CSF (***G*** - ***CSF***) in the culture supernatants using our sensitive enzyme-linked immunosorbent assay. ***G*** - ***CSF*** is an active hematopoietic growth factor specific for cells of a neutrophilic lineage, and muroctasin was found to significantly augment the ***G*** - ***CSF*** production from PBMC in vitro (P less than 0.01). Furthermore, production of ***G*** - ***CSF*** from human PBMC in the presence of muroctasin was also supported by the Northern blot analysis using cDNA encoding ***G*** - ***CSF*** as a probe.

L8 ANSWER 10 OF 12 MEDLINE on STN
 ACCESSION NUMBER: 90241309 MEDLINE
 DOCUMENT NUMBER: PubMed ID: 1692219
 TITLE: Stimulation of macrophages by muroctasin to produce colony-stimulating factors.
 AUTHOR: Akahane K; Yamaguchi F; Kita Y; Une T; Osada Y
 CORPORATE SOURCE: Research Institute, Daiichi Pharmaceutical Co. Ltd., Tokyo, Japan.
 SOURCE: Arzneimittel-Forschung, (1990 Feb) 40 (2 Pt 1) 179-83.
 Journal code: 0372660.
 ISSN: 0004-4172.
 PUB. COUNTRY: GERMANY, WEST: Germany, Federal Republic of
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
 LANGUAGE: English
 FILE SEGMENT: Priority Journals
 ENTRY MONTH: 199006
 ENTRY DATE: Entered STN: 19900706
 Last Updated on STN: 19960129

Entered Medline: 19900604
 AB Murocatasin (N2-[(N-acetylmuramoyl)-L-alanyl-D-isoglutaminyl]-N6-stearoyl-L-***lysine***, MDP-Lys(L18)], a muramyl dipeptide derivative, has been reported to increase the number of peripheral granulocytes and monocytes after subcutaneous administration to animals and humans. When macrophage cell lines such as P388D1 and J774.1 cells were incubated with muroctasin in vitro, the production of colony-stimulating factor (CSF) from these cells was increased significantly. By Northern blot analysis, expression of the M-CSF gene, but not the ***G*** - ***CSF*** gene, in these macrophage cell lines was found to be enhanced by treatment with muroctasin. However, expression of the ***G*** - ***CSF*** gene in NFSa cells, a fibrosarcoma cell line established as a ***G*** -

CSF producer, was actually enhanced by incubation with the conditioned medium from P388D1 cells stimulated with murectasin. Thus, the hematopoietic activity of murectasin was suggested to be attributable primarily to the enhanced production of M-CSF from macrophages. The enhanced ***G*** - ***CSF*** production from NFSA cells may be due at least to interleukin-1 released from murectasin-stimulated macrophages.

L8 ANSWER 11 OF 12 CAPLUS COPYRIGHT 2004 ACS on STN
 ACCESSION NUMBER: 1988:217269 CAPLUS
 DOCUMENT NUMBER: 108:217269
 TITLE: High-yield expression of modified human

granulocyte
 colony -
 stimulating
 factor gene in yeast and Escherichia coli
 INVENTOR(S): Cerretti, Douglas
 Pat; Cosman, David John; Gillis, Stephen; Mochizuki, Diane Yukiko; March, Carl Jack; Price, Virginia Lee; Tushinski, Robert J.; Urdal, David Lloyd
 PATENT ASSIGNEE(S): Immunex Corp., USA
 SOURCE: Eur. Pat. Appl., 38 pp.
 CODEN: EPXXDW
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	
EP 243153	A2	19871028	EP
1987-303509	19870422		
EP 243153	A3	19880113	
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE			
ZA 8702705	A	19871230	ZA
1987-2705	19870415		
DK 8702031	A	19871023	DK
1987-2031	19870421		
JP 63000299	A2	19880105	JP
1987-98465	19870421		
AU 8771844	A1	19871029	AU
1987-71844	19870422		
AU 601727	B2	19900920	
PRIORITY APPLN. INFO.:			
1986-856643	19860422		US
			US

1986-931458 19861114
 AB Human ***granulocyte***
 colony - ***stimulating***
 factor (hG-CSF) derivs. are recombinantly produced in high yields in yeast and Escherichia coli hosts. Plasmid pBC102.K22 was constructed contg. a site-specifically mutagenized hG-CSF gene (having the codon for

arginine at position 22 replaced with that for ***lysine*** such that a KEX2 protease-sensitive site is eliminated) linked at the 5'-end via a KEX2 recognition site to an alpha.-factor leader sequence and a sequence encoding an antigenic peptide capable of cleavage by bovine enterokinase. Yeast transformed with pBC102.K22 showed 5-fold higher expression than yeast transformed with vector contg. native hG-CSF protein gene.

L8 ANSWER 12 OF 12 MEDLINE on STN
 ACCESSION NUMBER: 86114130 MEDLINE
 DOCUMENT NUMBER: PubMed ID: 3878862
 TITLE: Effects of poly(I,C)-LC on growth and differentiation of normal and malignant myelopoietic progenitor cells.
 AUTHOR: Schlick E; Bettens F; Ruffmann R; Chirigos M A; Hewetson P
 SOURCE: Journal of biological response modifiers, (1985 Dec) 4 (6) 628-33.
 Journal code: 8219656.
 ISSN: 0732-6580.
 PUB. COUNTRY: United States
 DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
 LANGUAGE: English
 FILE SEGMENT: Priority Journals
 ENTRY MONTH: 198603
 ENTRY DATE: Entered STN: 19900321
 Last Updated on STN: 19900321

Entered Medline: 19860324
 AB Polyribonoinosinic-polycytidylic acid with poly-L- ***lysine*** stabilized with carboxymethylcellulose [poly(I,C)-LC] augmented, in a dose- and time-dependent manner, secretion of colony-stimulating factor (CSF) by peritoneal macrophages (M phi) and bone marrow cells (BMC). Optimal effects were found after 2 days of in vitro culture of the cells with 50 micrograms/ml of poly(I,C)-LC or 14 h to 3 days after a single intraperitoneal injection of 1-2 mg/kg of poly(I,C)-LC into normal mice. The increase in CSF secretion by M phi and BMC was paralleled in vivo by an increase in serum CSF levels, followed by a rise in committed granulocyte and M phi progenitor cells (GM-CFU-C), nucleated BMC, and blood leukocytes of myelomonocytic origin. Poly(I,C)-LC at doses greater than 4 mg/kg, however, were strongly myelosuppressive. In vitro treatment of undifferentiated myelomonocytic leukemia cells from the WEHI-3B cell line with 10-1,000 micrograms/ml of poly(I,C)-LC resulted in a significant increase in CSF secretion by the leukemic cells and a concomitant inhibition of their proliferation. Incubation of cells from the WEHI-3B D+ subline, which differentiate in response to GM-CSF or ***G*** -

CSF , with 50-100 micrograms/ml
poly(I,C)-LC in agar cultures
induced in approximately 45% of the
leukemic colonies a differentiation
into granulocytes and/or M phi.
Poly(I,C)-LC, however, had no effect on
differentiation of cells from the CSF
unresponsive WEHI-3B D- subline.
The CSF-inducing biological response
modifier poly(I,C)-LC thus has the
potential to stimulate growth and
differentiation of normal, as well as
differentiation of malignant myelopoietic
progenitor cells.

=> D IBIB ABS L9 1-19

L9 ANSWER 1 OF 19 WPIDS COPYRIGHT 2004
THOMSON DERWENT on STN DUPLICATE 1
ACCESSION NUMBER: 2004-316355 [29] WPIDS
DOC. NO. NON-CPI: N2004-252026
DOC. NO. CPI: C2004-120039
TITLE: Device useful for
transdermal delivery of active agent
comprises a member
having several stratum
corneum-piercing
microprotrusions, and a coating
containing the agent and
vasoconstrictor.
DERWENT CLASS: B04 B05 B07 D16 P34
INVENTOR(S): CORMIER, M; LIN, W;
MATRIANO, J; YOUNG, W
PATENT ASSIGNEE(S): (ALZA) ALZA CORP
COUNTRY COUNT: 105
PATENT INFORMATION:

	PATENT NO	KIND	DATE	WEEK
LA	PG			

32	WO 2004030743	A2	20040415	(200429)* EN
	RW: AT BE BG CH CY CZ DE DK EA EE ES			
	FI FR GB GH GR HU IE IT KE LS			
	LU MC MW MZ NL OA PT RO SD SE SI			
	SK SL SZ TR TZ UG ZM ZW			
	W: AE AG AL AM AT AU AZ BA BB BG BR			
	BY BZ CA CH CN CO CR CU CZ DE DK			
	DM DZ EC EE EG ES FI GB GD GE GH			
	GM HR HU ID IL IN IS JP KE KG KP			
	KR KZ LC LK LR LS LT LU LV MA MD			
	MG MK MN MW MX MZ NI NO NZ OM PG			
	PH PL PT RO RU SC SD SE SG SK SL			
	SY TJ TM TN TR TT TZ UA UG UZ VC			
	VN YU ZA ZM ZW			

APPLICATION DETAILS:

	PATENT NO	KIND	DATE
APPLICATION			

	WO 2004030743	A2	
	2003-US30761	20030929	WO

PRIORITY APPLN. INFO: US 2002-415121P
20020930
AN 2004-316355 [29] WPIDS

AB WO2004030743 A UPAB: 20040505
NOVELTY - A device for transdermal
delivery of an active agent (A)
comprises a member having several stratum
corneum-piercing
microprotrusions (10) and a coating (16)
disposed on the member. The
coating comprises (A) and a
vasoconstrictor.

DETAILED DESCRIPTION - An
INDEPENDENT CLAIM is included for the
manufacture of the device involving
either (P1): applying an aqueous
solution of (A) and the vasoconstrictor
on the member and drying the
solution to form a dry agent-containing
coating the member; or (P2):
etching a microprojection array on a
sheet (12) to form (10); bending (10)
so as to project from a plane of (12);
coating at least first (10) with
the aqueous solution; and drying the
applied aqueous solution.

USE - For transdermal delivery of
active agent e.g. calcitonin,
desmopressin (claimed).

ADVANTAGE - The device facilitates
and improves the transdermal
delivery of the active agent as the
microprojections pierce the skin where
interstitial fluid contacts and dissolves
the active agent and
vasoconstrictor; reduces exposure of the
agent to harsh environment of the
digestive tract by avoiding systemic
circulation; bypasses
gastrointestinal drug metabolism and drug
inactivation; and hence provides
an alternative administration route for
the active agents that cannot be
delivered orally or intravenously. The
device effectively minimizes
bleeding during delivery of biological
active agents due to the presence
of vasoconstrictor; reduces possibility
of inducing anaphylactic shock by
rapid repeat exposure to the agent and
increases the immunogenic response
to the agent.

DESCRIPTION OF DRAWING(S) - The
figure shows a perspective view of a
microprojection array.

microprojections 10
metal sheet 12
openings 14
coating 16
pattern coating. 18
Dwg.2/5

L9 ANSWER 2 OF 19 MEDLINE on STN
ACCESSION NUMBER: 2004108441 MEDLINE
DOCUMENT NUMBER: PubMed ID: 14604969
TITLE: Mobilization studies in
mice deficient in either C3 or C3a
receptor (C3aR) reveal a
novel role for complement in
retention of hematopoietic
stem/progenitor cells in bone
marrow.
AUTHOR: Ratajczak Janina; Reca
Ryan; Kucia Magda; Majka Marcin;

Allendorf Daniel J; Baran
Jarek T; Janowska-Wieczorek Anna;
Wetsel Rick A; Ross Gordon
D; Ratajczak Mariusz Z
CORPORATE SOURCE: Stem Cell Biology Program,
James Graham Brown Cancer
Center, University of
Louisville, 529 South Jackson St, KY
40202, USA..

mzrata01@louisville.edu

CONTRACT NUMBER: R01 AI25011 (NIAID)

R01 CA86412 (NCI)

R01 HL074333 (NHLBI)

R01 HL61796 (NHLBI)

SOURCE: Blood, (2004 Mar 15) 103
(6) 2071-8.

Journal code: 7603509.

ISSN: 0006-4971.

PUB. COUNTRY: United States

DOCUMENT TYPE: Journal; Article; (JOURNAL
ARTICLE)

LANGUAGE: English

FILE SEGMENT: Abridged Index Medicus

Journals; Priority Journals

ENTRY MONTH: 200404

ENTRY DATE: Entered STN: 20040305

Last Updated on STN:

20040416

Entered Medline: 20040415

AB The mechanisms regulating the
homing/mobilization of hematopoietic
stem/progenitor cells (HSPCs) are not
fully understood. In our previous
studies we showed that the complement C3
activation peptide, C3a,
sensitizes responses of HSPCs to stromal-
derived factor 1 (SDF-1). In
this study, mobilization was induced with
granulocyte

colony - ***stimulating***

factor (***G*** -

CSF) in both C3-deficient (C3-
/-) and C3a receptor-deficient
(C3aR-/-) mice as well as in wild-type
(wt) mice in the presence or
absence of a C3aR antagonist, SB 290157.

The data indicated (1)
significantly increased ***G*** -

CSF -induced mobilization in
C3-/- and C3aR-/- mice compared with wt
mice, (2) significantly

accelerated and enhanced ***G*** -

CSF -induced mobilization in
wt, but not in C3-/- or C3aR-/-, mice
treated with SB 290157, and (3)

deposition of C3b/iC3b fragments onto the
viable bone marrow (BM) cells of

G - ***CSF*** -treated

animals. Furthermore, mobilization
studies performed in chimeric mice

revealed that wt mice reconstituted
with C3aR-/- BM cells, but not C3aR-/-
mice reconstituted with wt BM

cells, are more sensitive to ***G*** -

CSF -induced

mobilization, suggesting that C3aR

deficiency on graft-derived cells is

responsible for this increased

mobilization. Hence we suggest that C3 is

activated in mobilized BM into C3a and

C3b, and that the C3a-C3aR axis

plays an important and novel role in
retention of HSPCs (by counteracting
mobilization) by increasing their
responsiveness to SDF-1, the
concentration of which is reduced in BM
during mobilization. The C3a-C3aR
axis may prevent an uncontrolled release
of HSPCs into peripheral blood.
These data further suggest that the C3aR
antagonist SB 290157 could be
developed as a drug to mobilize HSPCs for
transplantation.

L9 ANSWER 3 OF 19 WPIDS COPYRIGHT 2004

THOMSON DERWENT on STN

ACCESSION NUMBER: 2003-421352 [39] WPIDS

DOC. NO. CPI: C2003-110999

TITLE: Preparation of spray-
dried, drug-containing particles

useful for pulmonary

delivery of drug and for treating

disease involves

modulating the charge density of the

particles.

DERWENT CLASS: B04 B07 D16

INVENTOR(S): LEHRMAN, S R; STEVENSON,

C; YANG, B

PATENT ASSIGNEE(S): (INHA-N) INHALE

THERAPEUTIC SYSTEMS INC

COUNTRY COUNT: 101

PATENT INFORMATION:

	PATENT NO	KIND	DATE	WEEK
LA	PG			

22	WO 2003035028	A1	20030501	(200339)* EN
	RW: AT BE BG CH CY CZ DE DK EA EE ES			
	FI FR GB GH GM GR IE IT KE LS LU			
	MC MW MZ NL OA PT SD SE SK SL SZ			
	TR TZ UG ZM ZW			
	W: AE AG AL AM AT AU AZ BA BB BG BR			
	BY BZ CA CH CN CO CR CU CZ DE DK			
	DM DZ EC EE ES FI GB GD GE GH GM			
	HR HU ID IL IN IS JP KE KG KP KR			
	KZ LC LK LR LS LT LU LV MA MD MG			
	MK MN MW MX MZ NO NZ OM PH PL PT			
	RO RU SD SE SG SI SK SL TJ TM TN			
	TR TT TZ UA UG US UZ VC VN YU ZA			
	ZM ZW			

APPLICATION DETAILS:

PATENT NO	KIND
APPLICATION	DATE

WO 2003035028	A1	WO
2002-US33016	20021016	

PRIORITY APPLN. INFO: US 2001-330073P

20011019

AN 2003-421352 [39] WPIDS

AB WO2003035028 A UPAB: 20030619

NOVELTY - Preparation (M) of spray-dried,
drug containing particles

comprising combining an aqueous solution
with a drug and an optional

excipient, and spray drying the solution to form the spray-dried, drug-containing particles, is new.

DETAILED DESCRIPTION - In M, the aqueous solution has a pH that is different from the effective pI of the combination of the drug and the excipient. The net charge is associated with the drug and optional excipient as a result of an absolute difference between the pH and the pI.

ACTIVITY - None given.

MECHANISM OF ACTION - None given.

USE - M is useful for producing spray-dried, drug-containing particles; in the treatment of disease (claimed) useful for pulmonary delivery of drug.

ADVANTAGE - The formulation is stable and the dispersibility of the formulation can be maintained over 12-weeks; exhibits a drop in emitted dose of not more than 25% over 12-weeks; has moisture content of 6 wt.%.

The mass median aerodynamic diameter (MMAD) of the spray-dried drug-containing particles is 0.1 - 5 mu m. The bulk density of the formulation is 0.1 - 2 g/cm³. The method improves, maintains and optimizes the dispersibility of the particles. The formulation shows improvement in aerosol properties, thus reducing costly drug losses to the inhalation device; reducing the amount administered due to high aerosolization efficiency, and reducing the number of inhalations per day by increasing the amount of aerosolized drug that reaches the lungs of the patient.

Dwg.0/0

L9 ANSWER 4 OF 19 WPIDS COPYRIGHT 2004
THOMSON DERWENT on STN
ACCESSION NUMBER: 2002-415697 [44] WPIDS
CROSS REFERENCE: 2002-404689 [43]; 2002-425749 [45]; 2002-527345 [56]
DOC. NO. CPI: C2002-117304
TITLE: New synthetic protein, useful for inducing erythropoiesis or apoptosis or reducing inflammation, comprising pseudoamino acid residue with a ribosomally-specified amino acid sidechain attached to thiol.
DERWENT CLASS: B04
INVENTOR(S): BOTTI, P; BRADBURN, J
A; CHEN, S; CRESSMAN, S; HUNTER, C
L; KENT, S B H;
KOCHENDOERFER, G; LOW, D W;
KOCHENDOERFER, G G;
WILKEN, J G
PATENT ASSIGNEE(S): (GRYP-N) GRYPHON SCI;
(GRYP-N) GRYPHON THERAPEUTICS INC;
(BOTT-I) BOTTI P; (BRAD-I) BRADBURN J A; (CHEN-I) CHEN S; (CRES-I) CRESSMAN S;
(HUNT-I) HUNTER C L; (KENT-I) KENT S B H; (KOCH-I) KOCHENDOERFER G G; (LOWD-I) LOW D W

COUNTRY COUNT: 84
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK
LA PG			
WO 2002020034	A1	20020314	(200244)* EN
110			
RW: AT BE CH CY DE DK EA ES FI FR GB			
GH GM GR IE IT KE LS LU MC MW MZ			
NL OA PT SD SE SL SZ TR TZ UG ZW			
W: AL AM AT AU AZ BA BB BG BR BY CA			
CH CN CU CZ DE DK EE ES FI GB GE			
GH HU IL IS JP KE KG KP KR KZ LC			
LK LR LS LT LU LV MD MG MK MN MW			
MX NO NZ PL PT RO RU SD SE SG SI			
SK SL TJ TM TR TT UA UG US UZ VN			
YU ZW			
AU 2001073388	A	20020322	(200251)
EP 1315513	A2	20030604	(200337) EN
R: AL AT BE CH CY DE DK ES FI FR GB			
GR IE IT LI LT LU LV MC MK NL PT			
RO SE SI TR			
NO 2003001047	A	20030508	(200343)
NO 2003001048	A	20030508	(200343)
NO 2003001049	A	20030508	(200343)
KR 2003046411	A	20030612	(200370)
US 2003208046	A1	20031106	(200374)
KR 2003057529	A	20030704	(200377)
KR 2003061784	A	20030722	(200381)
CN 1457257	A	20031119	(200412)
ZA 2003000315	A	20040331	(200426)
114			

APPLICATION DETAILS:

PATENT NO	KIND	DATE
APPLICATION		
WO 2002020034	A1	WO
2001-US21935	20010712	
AU 2001073388	A	AU
2001-73388	20010712	
EP 1315513	A2	EP
2001-952657	20010712	
2001-US21935	20010712	
NO 2003001047	A	WO
2001-US21930	20010712	
2003-1047	20030306	NO
NO 2003001048	A	WO
2001-US21935	20010712	
2003-1048	20030306	NO
NO 2003001049	A	WO
2001-US21928	20010712	
2003-1049	20030306	NO
KR 2003046411	A	KR
2003-702085	20030213	
US 2003208046	A1	WO
2001-US21935	20010712	
2003-332386	20030108	US
KR 2003057529	A	KR
2003-702774	20030226	
KR 2003061784	A	KR
2003-702773	20030226	

CN 1457257 A CN
 2001-815290 20010712
 ZA 2003000315 A ZA
 2003-315 20030113

FILING DETAILS:

PATENT NO KIND
 PATENT NO

 AU 2001073388 A Based on WO
 2002020034
 EP 1315513 A2 Based on WO
 2002020034

PRIORITY APPLN. INFO: US 2000-236377P
 20000929; US

20000908; US 2000-231339P

20030108 2003-332386

AN 2002-415697 [44] WPIDS
 CR 2002-404689 [43]; 2002-425749 [45]; 2002-527345 [56]
 AB WO 200220034 A UPAB: 20040421
 NOVELTY - Synthetic protein (I)
 containing a pseudo-amino acid (paa)
 residue in which the sidechain residue is
 -SRa, where Ra is an optionally
 substituted terminal portion (or its
 analog) of a
 ribosomally-specified amino acid (raa)
 side chain.

DETAILED DESCRIPTION - INDEPENDENT
 CLAIMS are also included for:

(1) Treatment of human diseases by
 administering at least one (I), of
 monomer molecular weight over 25 kD, that
 mimics the biological activity
 of a ribosomally specified, bioactive
 human protein receptor (or
 fragment), protein receptor ligand (or
 fragment), or a cytokine;

(2) A method, designated 'pseudo-
 native chemical ligation', for
 synthesizing a polypeptide of formula
 (Ia); and

(3) A polypeptide of formula (Ia).
 Q and W = one or more additional
 amino acids (aa);
 aaN and aaC = N- and C-terminal aa;
 and

aax and aay = internal aa with
 sidechains x and y.

ACTIVITY - Erythropoietic;
 Antiinflammatory; Angiogenic; Cytostatic.

A modified form of human
 erythropoietin (EPO) containing
 S-carboxymethylated Cys at position 89
 had in vitro ED50 in human UT-7
 (megakaryocytic leukemia) cells of 1570
 pM; compare 32.5 pM for
 recombinant human EPO.

MECHANISM OF ACTION - None given.
 USE - (I), which have the activity
 of protein receptors, or their
 ligands, or of cytokines, are useful in
 human medicine, e.g. for inducing
 erythropoiesis; inducing or reducing
 inflammation; initiating angiogenesis

or vascularization; inducing apoptosis
 and modulating the cell cycle.

ADVANTAGE - (I) can be produced by a
 chemical ligation method that:

(1) is applicable to a wide variety
 of amino acid residues,

(poly)peptides and other polymers;

(2) uses an easily removed thiol-
 containing auxiliary; and

(3) connects molecules through a
 native amide bond. Selected polymers
 can be attached at user-defined positions
 through selected types of bonds.

Selected polymers can be attached at
 user-defined positions through

selected types of bonds. Compared with
 native proteins, (I) may be more

stable or have different specificities
 for substrates, inhibitors,

receptors, ligands etc.

Dwg.0/7

L9 ANSWER 5 OF 19 WPIDS COPYRIGHT 2004
 THOMSON DERWENT on STN

ACCESSION NUMBER: 2002-731683 [79] WPIDS

DOC. NO. NON-CPI: N2002-576838

DOC. NO. CPI: C2002-207188

TITLE: Device for transdermally
 delivering agent, has member

having stratum-corneum
 piercing microprotrusions

dry-coated with aqueous
 solution having preset viscosity

and contains active
 agent having preset aqueous

solubility.

DERWENT CLASS: B07 D22 P34

INVENTOR(S): CORMIER, M J N; DADDONA,
 P E; NYAM, K; YOUNG, W A

PATENT ASSIGNEE(S): (CORM-I) CORMIER M J N;
 (DADD-I) DADDONA P E; (NYAM-I)

NYAM K; (YOUN-I) YOUNG W

A; (ALZA) ALZA CORP

COUNTRY COUNT: 95

PATENT INFORMATION:

LA	PATENT NO	KIND	DATE	WEEK
19	US 2002128599	A1	20020912	(200279)*
	WO 2002094368	A1	20021128	(200280) EN
	RW: AT BE CH CY DE DK EA ES FI FR GB			
	GH GM GR IE IT KE LS LU MC MW MZ			
	NL OA PT SD SE SL SZ TR TZ UG ZW			
	W: AE AG AL AM AT AU AZ BA BB BG BR			
	BY BZ CA CH CN CR CU CZ DE DK DM			
	DZ EE ES FI GB GD GE GH GM HR HU			
	ID IL IN IS JP KE KG KP KR KZ LC			
	LK LR LS LT LU LV MA MD MG MK MN			
	MW MX MZ NO NZ PL PT RO RU SD SE			
	SG SI SK SL TJ TM TR TT TZ UA UG			
	UZ VN YU ZA ZW			
	NO 2003001875	A	20030623	(200348)
	EP 1333880	A1	20030813	(200355) EN
	R: AL AT BE CH CY DE DK ES FI FR GB			
	GR IE IT LI LT LU LV MC MK NL PT			
	RO SE SI TR			
	KR 2003060922	A	20030716	(200381)
	BR 2001014909	A	20040203	(200413)

HU 2003002924 A1 20031229 (200413)

APPLICATION DETAILS:

PATENT NO APPLICATION	KIND DATE	
US 2002128599	A1 Provisional	US
2000-244038P	20001026	
2001-45842	20011026	US
WO 2002094368	A1	WO
2001-US51496	20011026	WO
NO 2003001875	A	WO
2001-US51496	20011026	NO
2003-1875	20030425	EP
EP 1333880	A1	EP
2001-273947	20011026	WO
2001-US51496	20011026	KR
KR 2003060922	A	BR
2003-705755	20030425	WO
BR 2001014909	A	WO
2001-14909	20011026	HU
2001-US51496	20011026	
HU 2003002924	A1	
2001-US51496	20011026	
2003-2924	20011026	

FILING DETAILS:

PATENT NO	KIND	
EP 1333880	A1 Based on	WO
2002094368		
BR 2001014909	A Based on	WO
2002094368		
HU 2003002924	A1 Based on	WO
2002094368		

PRIORITY APPLN. INFO: US 2000-244038P
20001026; US

2001-45842
20011026
AN 2002-731683 [79] WPIDS
AB US2002128599 A UPAB: 20021209
NOVELTY - Device for transdermally
delivering an active agent comprises a
member having several stratum corneum-
piercing microprotrusions (10)
dry-coated with an aqueous solution. The
solution contains a potent active
agent when administered in an amount less
than 1 mg. The active agent has
an aqueous solubility of greater than 50
mg/ml and the aqueous solution
has a viscosity of less than 500
centipoise.

DETAILED DESCRIPTION - An
INDEPENDENT CLAIM is also included for a
method of making a device for
transdermally delivering an agent.

USE - For administering and
enhancing transdermal delivery of an

active agent such as adrenocorticotrophic
hormone (1-24), calcitonin,
desmopressin, luteinizing hormone
releasing hormone (LHRM), goserelin,
leuprolide, buserelin, triptorelin, LHRH
analogs, PTH,
vasopressin, deamino (val4, D-Arg8),
arginine vasopressin,
interferon- alpha, interferon- beta,
interferon- gamma, follicle
stimulating hormone (FSH), erythropoietin
(EPO), granulocyte macrophage
colony stimulating factor (GM-CSF),
granulocyte ***colony***
stimulating ***factor*** (
G - ***CSF***),
interleukin-10 (1L-10), glucagon, growth
hormone releasing factor (GRF) or
its ***analogs*** (claimed).

ADVANTAGE - The delivery device
eliminates the difficulty of
inconvenience, painful, uncomfortable
procedure and reduces the
possibility of infection. Many
therapeutic proteins can be easily
administered transdermally, since
proteins are susceptible to
gastrointestinal degradation and exhibit
poor gastrointestinal uptake.
Transdermal delivery bypasses
gastrointestinal drug metabolism, reduces
first-pass effects, and avoids the
possible deactivation by digestive and
liver enzymes.

DESCRIPTION OF DRAWING(S) - The
figure shows the perspective view of
a portion of microprotrusion array.
Microprotrusions 10
Dwg.1/7

L9 ANSWER 6 OF 19 CAPLUS COPYRIGHT 2004
ACS on STN

ACCESSION NUMBER: 2002:832643 CAPLUS
DOCUMENT NUMBER: 137:304765

TITLE: Compositions and
methods for reestablishing gene
transcription through
inhibition of DNA methylation
and histone

deacetylase
INVENTOR(S): Dimartino, Jorge
PATENT ASSIGNEE(S): Supergen, Inc., USA
SOURCE: PCT Int. Appl., 54
pp.

CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	
APPLICATION NO.	DATE		
WO 2002085400	A1	20021031	WO
2002-US12092	20020419		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,		

GM, HR, HU, ID, IL, IN, IS, JP,
KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK,
MN, MW, MX, MZ, NO, NZ, OM, PH,
PL, PT, RO, RU, SD, SE, SG, SI,
SK, SL, TJ, TM, TN, TR, TT, TZ,
UA, UG, US, UZ, VN, YU, ZA, ZM,
ZW, AM, AZ, BY, KG, KZ, MD, RU,
TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL,
SZ, TZ, UG, ZM, ZW, AT, BE, CH,
CY, DE, DK, ES, FI, FR, GB, GR,
IE, IT, LU, MC, NL, PT, SE, TR,
BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG
EP 1389127 A1 20040218 EP
2002-731396 20020419
R: AT, BE, CH, DE, DK, ES, FR, GB,
GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY,
AL, TR
PRIORITY APPLN. INFO.: US
2001-841744 A1 20010424 WO

2002-US12092 W 20020419
AB Compns. and methods are provided for
treating diseases assocd. with
aberrant silencing of gene expression
such as cancer by reestablishing the
gene expression through inhibition of DNA
hypomethylation and histone
deacetylase. The method comprises:
administering to a patient suffering
from the disease a therapeutically
effective amt. of a DNA methylation
inhibitor such as a cysteine
analog such as decitabine, in
combination with an effective amt. of
histone deacetylase inhibitor such
as hydroxamic acid, cyclic peptide,
benzamide, butyrate, and depudecin.
REFERENCE COUNT: 5 THERE ARE 5
CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL
CITATIONS AVAILABLE IN THE RE FORMAT

L9 ANSWER 7 OF 19 CAPLUS COPYRIGHT 2004
ACS on STN
ACCESSION NUMBER: 2002:616193 CAPLUS
DOCUMENT NUMBER: 137:174933
TITLE: Modulated-release
polymeric silicate particles for
aerosol delivery
INVENTOR(S): Zhu, Yaping;
Stefanos, Simon; Adjei, Akwete L.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl.
Publ., 11 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	
APPLICATION NO.	DATE		
US 2002110528	A1	20020815	US
2001-784673	20010215		
US 6544497	B2	20030408	

WO 2002066011 A1 20020829 WO
2002-US4286 20020213
W: AE, AG, AL, AM, AT, AU, AZ, BA,
BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ,
EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP,
KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK,
MN, MW, MX, MZ, NO, NZ, OM, PH,
PL, PT, RO, RU, SD, SE, SG, SI,
SK, SL, TJ, TM, TN, TR, TT, TZ,
UA, UG, UZ, VN, YU, ZA, ZM, ZW,
AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL,
SZ, TZ, UG, ZM, ZW, AT, BE, CH,
CY, DE, DK, ES, FI, FR, GB, GR,
IE, IT, LU, MC, NL, PT, SE, TR,
BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG
EP 1361860 A1 20031119 EP
2002-724942 20020213
R: AT, BE, CH, DE, DK, ES, FR, GB,
GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY,
AL, TR
PRIORITY APPLN. INFO.: US
2001-784673 A 20010215 WO

2002-US4286 W 20020213
AB A modulated release aerosol formulation
comprises a polymer, e.g. silica
gel or fumed silica gel, having a
selected medicament assocd. there with,
a fluid carrier for carrying and
delivering the construct and a
stabilizer. The polymer is present in an
amt. of about 0.000001-10%. A
medicament comprises a protein or peptide
with a mol. size of about 1-150
kD, such as insulin, amylin, an
interleukin, an interferon, heparin, a
thrombolytic, an antitrypsin, a hormone,
a growth factor, an enzyme, etc.
A stabilizer is selected from dipeptides
and tripeptides. A method of
treating in a human or an animal a
condition capable of treatment by
dermal, sublingual, buccal, oral, or
nasal application comprises
administering an aerosol formulation in a
canister equipped with a metered
dose valve.

L9 ANSWER 8 OF 19 CAPLUS COPYRIGHT 2004
ACS on STN
ACCESSION NUMBER: 2002:616190 CAPLUS
DOCUMENT NUMBER: 137:174931
TITLE: Modulated release
particles for pharmaceutical lung
delivery
INVENTOR(S): Adjei, Akwete L.;
Zhu, Yaping
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl.
Publ., 11 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO. KIND DATE
APPLICATION NO. DATE

US 2002110525 A1 20020815 US
2001-784556 20010215
US 6551578 B2 20030422
WO 2002066008 A1 20020829 WO
2002-US3992 20020207
W: AE, AG, AL, AM, AT, AU, AZ, BA,
BB, BG, BR, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ,
EC, EE, ES, FI, GB, GD, GE, GH,
GM, HR, HU, ID, IL, IN, IS, JP,
KE, KG, KP, KR, KZ, LC, LK, LR,
LS, LT, LU, LV, MA, MD, MG, MK,
MN, MW, MX, MZ, NO, NZ, OM, PH,
PL, PT, RO, RU, SD, SE, SG, SI,
SK, SL, TJ, TM, TN, TR, TT, TZ,
UA, UG, UZ, VN, YU, ZA, ZW, AM,
AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, MZ, SD, SL,
SZ, TZ, UG, ZM, ZW, AT, BE, CH,
CY, DE, DK, ES, FI, FR, GB, GR,
IE, IT, LU, MC, NL, PT, SE, TR,
BF, BJ, CF, CG, CI, CM, GA, GN,
GQ, GW, ML, MR, NE, SN, TD, TG
EP 1361857 A1 20031119 EP
2002-709465 20020207
R: AT, BE, CH, DE, DK, ES, FR, GB,
GR, IT, LI, LU, NL, SE, MC, PT,
IE, SI, LT, LV, FI, RO, MK, CY,
AL, TR
PRIORITY APPLN. INFO.: US
2001-784556 A 20010215 WO
2002-US3992 W 20020207
OTHER SOURCE(S): MARPAT 137:174931
AB A modulated release aerosol formulation
is disclosed. The formulation
comprises a polysaccharide polymer having
a selected drug assocd., a fluid
carrier for carrying and delivering the
construct and a stabilizer. The
stabilizer is selected from the group
consisting of an amino acid e.g., a
monoaminocarboxylic acid, a
monoaminodicarboxylic acid and a
diaminomonocarboxylic acid. The
polysaccharide can be from alginic acid
or a salt, e.g., guar gum, gum karaya,
agar, carrageenan, and cellulose.

L9 ANSWER 9 OF 19 WPIDS COPYRIGHT 2004
THOMSON DERWENT on STN
ACCESSION NUMBER: 2002-075094 [10] WPIDS
DOC. NO. CPI: C2002-022327
TITLE: Protein conjugates that
selectively target certain
tissues and organs
useful for treating and preventing
various diseases,
comprises glucose-aminoglycan-targeting
domain conjugated to a
therapeutic protein.
DERWENT CLASS: B04 D16
INVENTOR(S): SEREDA, T J; WIEBE, D J;
WILLIAMS, A M; WOLOSKI, B M R
PATENT ASSIGNEE(S): (CANG-N) CANGENE CORP;
(SERE-I) SEREDA T J; (WIEB-I)

WIEBE D J; (WILL-I)
WILLIAMS A M; (WOLO-I) WOLOSKI B M R
COUNTRY COUNT: 96
PATENT INFORMATION:

PATENT NO KIND DATE WEEK
LA PG

WO 2001080899 A2 20011101 (200210) * EN
121
RW: AT BE CH CY DE DK EA ES FI FR GB
GH GM GR IE IT KE LS LU MC MW MZ
NL OA PT SD SE SL SZ TR TZ UG ZW
W: AE AG AL AM AT AU AZ BA BB BG BR
BY BZ CA CH CN CO CR CU CZ DE DK
DM DZ EE ES FI GB GD GE GH GM HR
HU ID IL IN IS JP KE KG KP KR KZ
LC LK LR LS LT LU LV MA MD MG MK
MN MW MX MZ NO NZ PL PT RO RU SD
SE SG SI SK SL TJ TM TR TT TZ UA
UG US UZ VN YU ZA ZW
AU 2001050212 A 20011107 (200219)
EP 1274461 A2 20030115 (200306) EN
R: AL AT BE CH CY DE DK ES FI FR GB
GR IE IT LI LT LU LV MC MK NL PT
RO SE SI TR
US 2004037834 A1 20040226 (200416)

APPLICATION DETAILS:

PATENT NO KIND
APPLICATION DATE

WO 2001080899 A2 WO
2001-CA533 20010420 AU
AU 2001050212 A AU
2001-50212 20010420 EP
EP 1274461 A2 EP
2001-923439 20010420 WO
2001-CA533 20010420 WO
US 2004037834 A1 WO
2001-CA533 20010420 US
2003-257377 20030610

FILING DETAILS:

PATENT NO KIND
PATENT NO

AU 2001050212 A Based on WO
2001080899
EP 1274461 A2 Based on WO
2001080899
PRIORITY APPLN. INFO: US 2000-198613P
20000420; US 2003-257377
20030610
AN 2002-075094 [10] WPIDS
AB WO 200180899 A UPAB: 20020213
NOVELTY - A conjugate (I) comprising an
hyaluronic acid (HA)-binding
protein (HABP1) or peptide (HABP2)
contiguous with, or coupled to a
polypeptide conjugated to a therapeutic
agent, is new.

DETAILED DESCRIPTION - INDEPENDENT
CLAIMS are also included for the
following:

(1) an isolated and purified nucleic
acid sequence (II) encoding an
HABP1 or peptide in sequence with a
therapeutic agent;

(2) preparation (M1) of (I) by
inserting a first nucleotide sequence
encoding a HABP1 directly linked to a
second nucleotide sequence encoding
a therapeutic protein into a suitable
vector, expressing the vector in an
acceptable host, purifying conjugate
molecule from host or expression
medium;

(3) preparing a pharmaceutical for
treating an animal in need of
treatment, comprising the preparation of
(I) and suspending (I) in a
carrier, diluent or excipient;

(4) pharmaceutical composition (III)
comprising (I).

ACTIVITY - Immunosuppressive;
cytostatic.

MECHANISM OF ACTION - Gene therapy.

USE - (I) is useful for altering in
vivo the distribution of a
therapeutic agent comprising
administering (I) to the animal where
conjugate molecule will distribute
primarily in tissues and organs
containing high levels of endogenous HA;
and for treating mammal with a
disorder where a diseased tissue of the
mammal contains high level of HA
(claimed).

ADVANTAGE - Lower therapeutic
dosages required also translates into
lower immunogenicity of the conjugated
protein as compared to the native
protein. As a result, conjugates
improves patient compliance and reduce
direct and indirect costs associated with
the drug substance and its
administration. Conjugates allows for the
use, where appropriate, of
lower, safer, dosages as compared to the
conventional dosage requirements
for the unconjugated corresponding
therapeutic agent. Conjugate molecules
has an increased half-life and potency,
resulting in prolonged circulation
of the molecule, efficient distribution
into the target tissues, and
increased bioavailability.
Dwg.0/0

L9 ANSWER 10 OF 19 WPIDS COPYRIGHT 2004
THOMSON DERWENT on STN
ACCESSION NUMBER: 2001-596689 [67] WPIDS
CROSS REFERENCE: 2001-557522 [62]
DOC. NO. NON-CPI: N2001-444889
DOC. NO. CPI: C2001-176515
TITLE: Formulation to treat
e.g. asthma comprises a protein or
peptide medicament in a
fluid carrier and a stabilizer
selected from an amino
acid or its derivative.
DERWENT CLASS: B04 D16 P34

INVENTOR(S): ADJEI, A L; STEFANOS, S;
SUN, J Z; ZHU, Y
PATENT ASSIGNEE(S): (AERO-N) AEROPHARM
TECHNOLOGY INC
COUNTRY COUNT: 94
PATENT INFORMATION:

PATENT NO	KIND	DATE	WEEK
LA PG			

WO 2001060420	A1	20010823	(200167)* EN
26			
RW: AT BE CH CY DE DK EA ES FI FR GB			
GH GM GR IE IT KE LS LU MC MW MZ			
NL OA PT SD SE SL SZ TR TZ UG ZW			
W: AE AG AL AM AT AU AZ BA BB BG BR			
BY BZ CA CH CN CR CU CZ DE DK DM			
DZ EE ES FI GB GD GE GH GM HR HU			
ID IL IN IS JP KE KG KP KR KZ LC			
LK LR LS LT LU LV MA MD MG MK MN			
MW MX MZ NO NZ PL PT RO RU SD SE			
SG SI SK SL TJ TM TR TT TZ UA UG			
UZ VN YU ZA ZW			
AU 2001027559	A	20010827	(200176)
EP 1292283	A1	20030319	(200322) EN
R: AL AT BE CH CY DE DK ES FI FR GB			
GR IE IT LI LT LU LV MC MK NL PT			
RO SE SI TR			
JP 2003524646	W	20030819	(200356)
30			
MX 2002007187	A1	20021201	(200377)
CN 1440298	A	20030903	(200380)

APPLICATION DETAILS:

PATENT NO	KIND	DATE
APPLICATION		

WO 2001060420	A1	WO
2001-US117	20010102	
AU 2001027559	A	AU
2001-27559	20010102	
EP 1292283	A1	EP
2001-901681	20010102	
		WO
2001-US117	20010102	
JP 2003524646	W	JP
2001-559515	20010102	
		WO
2001-US117	20010102	
MX 2002007187	A1	WO
2001-US117	20010102	
		MX
2002-7187	20020724	
CN 1440298	A	CN
2001-807195	20010102	

FILING DETAILS:

PATENT NO	KIND
PATENT NO	

AU 2001027559	A Based on
2001060420	
EP 1292283	A1 Based on
2001060420	
JP 2003524646	W Based on
2001060420	

MX 2002007187 A1 Based on WO
2001060420
PRIORITY APPLN. INFO: US 2000-702195
20001030; US
20000125; US
20000125
AN 2001-596689 [67] WPIDS
CR 2001-557522 [62]
AB WO 200160420 A UPAB: 20031211

NOVELTY - Medicinal formulation comprises
(a) a protein or peptide
medicament having about 1 - 150 K Dalton
molecular size, (b) a fluid
carrier for containing (a) and (c) a
stabilizer selected from amino
acid(s) and/or derivative(s).

DETAILED DESCRIPTION - INDEPENDENT
CLAIMS are included for the
following:

(1) preparing a stable medicinal
aerosol formulation which comprises
combining (a), (b) and (c) and dispersing
them (preferably using cosolvent
in both steps);

(2) a formulation which is in an
aerosol canister equipped with a
metered dose valve;

(3) a method of stabilizing a
suspension aerosol formulation
comprising a propellant and a protein or
peptide medicament which
comprises incorporating a stabilizer to
prevent settling, creaming, or
flocculation of the formulation; and

(4) a metered dose inhaler which
contains a medicinal aerosol
formulation comprising (a), propellant
and (c).

ACTIVITY - Antiallergic;
Antiinflammatory; Antiasthmatic;
Antidiabetic; Antianginal.

MECHANISM OF ACTION - None given.

USE - To effect bronchodilation in a
human or an animal or to treat a
condition e.g. asthma, chronic
obstructive pulmonary disease, allergic
rhinitis, rhinitis, diabetes, angina or
local infection, cystic fibrosis,
pneumonia, pain management immune
deficiency, hormonal therapy and
erythropoiesis.

ADVANTAGE - There is no settling,
creaming or flocculation of the
medicine and it is reproducible
(claimed). The medicine is stable and does
not require cosolvents or surfactants.
Dwg.0/0

L9 ANSWER 11 OF 19 MEDLINE on STN
ACCESSION NUMBER: 2001490320 MEDLINE
DOCUMENT NUMBER: PubMed ID: 11532576
TITLE: Effect of poly-L-
arginine on the nasal absorption
of FITC-dextran of
different molecular weights and
recombinant human
granulocyte ***colony*** -

stimulating
factor (rhG-CSF) in rats.
AUTHOR: Miyamoto M; Natsume H;
Sato I; Ohtake K; Yamaguchi M;
Kobayashi D; Sugibayashi
K; Morimoto Y
CORPORATE SOURCE: Analytical Division,
Nissan Chemical Co. Ltd., 722-1
Tsuboi, Funabashi, Chiba
274-0062, Japan.
SOURCE: International journal of
pharmaceutics, (2001 Sep 11) 226
(1-2) 127-38.
Journal code: 7804127.
ISSN: 0378-5173.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL
ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200110
ENTRY DATE: Entered STN: 20010905
Last Updated on STN:

20011029 Entered Medline: 20011025
AB The effect of poly-L- ***arginine***
(poly-L-Arg) on the in vivo nasal
absorption of FITC-dextran with a mean
molecular weight ranging from 4.3
to 167 kDa and recombinant human
granulocyte ***colony*** -
stimulating ***factor***
(rhG-CSF) in rats were studied. When
FITC-dextran were co-administered
intranasally with 1.0 w/v% poly-L-Arg
of different molecular weight (MW, ca.
45.5 and 92 kDa, poly-L-Arg (50)
and poly-L-Arg (100)), the
bioavailability (F(infinity)) increased
markedly compared with that after
administration of FITC-dextran alone.
However, the F(infinity) decreased
exponentially with the increasing
molecular weight of FITC-dextran. There
was no significant difference
between the enhanced nasal absorption of
FITC-dextran achieved by the
co-administration of poly-L-Arg (50) and
poly-L-Arg (100). Moreover, the
relationship between the F(infinity) and
the molecular weight of
FITC-dextran indicated that the
molecular weight of protein drugs, which
exhibited efficient absorption with poly-
L-Arg, was about 20 kDa, when the
lower limit of bioavailability for
developing a potent transnasal delivery
system was assumed to be about 10%.
Indeed, the nasal absorption of
rhG-CSF, which has a molecular weight of
18.8 kDa, was also increased
after co-administration of 1.0 w/v% poly-
L-Arg (50) and the F(infinity)
was about 11%. It seems likely that
poly-L-Arg can be used to provide
adequate nasal absorption of various
protein drugs which have a molecular
weight of about 20 kDa, thereby allowing
the successful development of a
variety of transnasal drug delivery
systems.

L9 ANSWER 12 OF 19 CAPLUS COPYRIGHT 2004
 ACS on STN
 ACCESSION NUMBER: 1995:951242 CAPLUS
 DOCUMENT NUMBER: 124:84915
 TITLE: Fusion products of
 interleukin 3 with hematopoietic
 growth factors and
 their manufacture for therapeutic
 use
 INVENTOR(S): Bauer, Christopher
 S.; Abrams, Mark Allen;
 Sarah Ruth; Caparon, Marie Helena;
 Easton, Alan Michael;
 Klein, Barbara Kure; Mc, Kearn
 John Patrick; Olins,
 Peter O.; Paik, Kumnan; Thomas,
 John Warren
 PATENT ASSIGNEE(S): G. D. Searle and Co.,
 USA
 SOURCE: PCT Int. Appl., 447
 PP.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 17
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9521254	A1	19950810	WO	
1995-US1185		19950202		
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US				
RW: KE, MW, SD, SZ, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 6057133	A	20000502	US	
1994-192325		19940204		
AU 9518356	A1	19950821	AU	
1995-18356		19950202		
AU 697433	B2	19981008		
EP 742826	A1	19961120	EP	
1995-910141		19950202		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
BR 9506733	A	19970923	BR	
1995-6733		19950202		
JP 10502801	T2	19980317	JP	
1995-520671		19950202		
RO 118016	B1	20021230	RO	
1996-1594		19950202		
US 6022535	A	20000208	US	
1995-469318		19950606		
US 6030812	A	20000229	US	
1995-468609		19950606		
US 6361977	B1	20020326	US	
1995-446872		19950606		
NO 9603225	A	19960925	NO	
1996-3225		19960801		

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
FI 9603072	A	19960802	FI	
1996-3072		19960802		
US 6436387	B1	20020820	US	
1996-762227		19961209		
US 2003185790	A1	20031002	US	
2002-83446		20020226		
PRIORITY APPLN. INFO.:				
1994-192325	A2	19940204		
1992-981044	B2	19921124		
1993-US11197	A2	19931122		
1995-US1185	W	19950202		
1995-411795	A2	19950406		
1995-446872	A2	19950606		

1996-762227 A3 19961209
 AB Human interleukin-3 (hIL-3) variants fused with other colony stimulating factors (CSF), cytokines, lymphokines, interleukins, hematopoietic growth factors or IL-3 variants are described. These variants and fusion proteins are intended for use in the stimulation of hematopoiesis in support of chemotherapy of cancer, notably of leukemias and B-lymphomas. The IL-3 variants may have 1-14 N- or 1-15 C-terminal deletions and have 4-26 addnl. amino acid substitutions. A linker peptide derived from an Ig hinge region can be used to join the domains of the fusion protein and a proteinase cleavage site may be incorporated into the linker region. The construction of expression vectors for manuf. of these fusion proteins in Escherichia coli is described. A no. of fusion proteins were tested and found to show the biol. activities expected of both moieties.

L9 ANSWER 13 OF 19 CAPLUS COPYRIGHT 2004
 ACS on STN
 ACCESSION NUMBER: 1995:615193 CAPLUS
 DOCUMENT NUMBER: 123:25669
 TITLE: Peptides derived from
 hemopoietic growth factors as
 antagonists of the
 growth factors
 INVENTOR(S): Vadas, Mathew
 Alexander; Lopez, Angel Francisco;
 Shannon, Mary Frances
 PATENT ASSIGNEE(S): Medvet Science Pty.
 Ltd., Australia
 SOURCE: PCT Int. Appl., 60
 PP.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 3
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE

WO 9504075 A1 19950209 WO
 1994-AU432 19940728
 W: AM, AT, AU, BB, BG, BR, BY, CA,
 CH, CN, CZ, DE, DK, ES, FI, GB,
 GE, HU, JP, KE, KG, KP, KR, KZ,
 LK, LT, LU, LV, MD, MG, MN, MW,
 NL, NO, NZ, PL, PT, RO, RU, SD,
 SE, SI, SK, TJ, TT, UA, US, UZ, VN
 RW: KE, MW, SD, AT, BE, CH, DE, DK,
 ES, FR, GB, GR, IE, IT, LU, MC,
 NL, PT, SE, BF, BJ, CF, CG, CI,
 CM, GA, GN, ML, MR, NE, SN, TD, TG
 CA 2168261 AA 19950209 CA
 1994-2168261 19940728
 AU 9473414 A1 19950228 AU
 1994-73414 19940728
 AU 690128 B2 19980423
 EP 715633 A1 19960612 EP
 1994-922181 19940728
 R: AT, BE, CH, DE, DK, ES, FR, GB,
 GR, IE, IT, LI, LU, MC, NL, PT, SE
 JP 09501154 T2 19970204 JP
 1994-505450 19940728
 US 5939063 A 19990817 US
 1996-591438 19960408
 NZ 329156 A 20000728 NZ
 1997-329156 19971111
 AU 9934974 A1 19990909 AU
 1999-34974 19990611
 PRIORITY APPLN. INFO.: AU
 1993-186 A 19930728
 AU
 1994-4772 A 19940330
 WO
 1994-AU432 W 19940728
 AU
 1996-61153 A3 19960621
 NZ
 1997-269766 A1 19971111
 AB Modified and variant forms of hemopoietic
 growth factors (HGF) capable of
 acting as antagonists to the
 corresponding native hemopoietic growth
 factors are described for use in
 ameliorating aberrant effects caused by
 the native mols. A modified hemopoietic
 growth factor (HGF) is
 characterized by being in unglycosidated
 form and has an .alpha.-helical
 domain with one or more of any exposed
 acidic amino acids substituted with
 a basic amino acid. The preferred HGF
 are granulocyte-macrophage
 colony-stimulating factor (GM-CSF),
 interleukins (IL)-2, IL-3, IL-4, IL-5,
 IL-6, IL-7, IL-9, IL-10, ***G*** -
 CSF and erythropoietin
 (EPO). The synthesis and biol. activity
 of a no. of such peptides is
 demonstrated.
 L9 ANSWER 14 OF 19 MEDLINE on STN
 ACCESSION NUMBER: 95136368 MEDLINE
 DOCUMENT NUMBER: PubMed ID: 7530603
 TITLE: Targeted disruption of the
 NF-IL6 gene discloses its
 essential role in bacteria
 killing and tumor cytotoxicity
 by macrophages.
 AUTHOR: Tanaka T; Akira S; Yoshida
 K; Umemoto M; Yoneda Y;

Shirafuji N; Fujiwara H;
 Suematsu S; Yoshida N; Kishimoto T
 CORPORATE SOURCE: Institute for Molecular
 and Cellular Biology, Osaka
 University, Japan.
 SOURCE: Cell, (1995 Jan 27) 80 (2)
 353-61.
 Journal code: 0413066.
 ISSN: 0092-8674.
 PUB. COUNTRY: United States
 DOCUMENT TYPE: Journal; Article; (JOURNAL
 ARTICLE)
 LANGUAGE: English
 FILE SEGMENT: Priority Journals
 ENTRY MONTH: 199503
 ENTRY DATE: Entered STN: 19950314
 Last Updated on STN:
 19960129
 Entered Medline: 19950301
 AB To investigate the role of NF-IL6 in
 vivo, we have generated NF-IL6 (-/-)
 mice by gene targeting. NF-IL6 (-/-)
 mice were highly susceptible to
 infection by *Listeria monocytogenes*.
 Electron microscopic observation
 revealed the escape of a larger number of
 pathogens from the phagosome to
 the cytoplasm in activated macrophages
 from NF-IL6 (-/-) mice.
 Furthermore, the tumor cytotoxicity of
 macrophages from NF-IL6 (-/-) mice
 was severely impaired. However,
 cytokines involved in macrophage
 activation, such as TNF and IFN gamma,
 were induced normally in NF-IL6
 (-/-) mice. Nitric oxide (NO) formation
 was induced to a similar extent
 in macrophages from both wild-type and
 NF-IL6 (-/-) mice. These results
 demonstrate the crucial role of NF-IL6 in
 macrophage bactericidal and
 tumoricidal activities as well as the
 existence of a NO-independent
 mechanism of these activities. We also
 demonstrate that NF-IL6 is
 essential for the induction of ***G***
 - ***CSF*** in macrophages
 and fibroblasts.
 L9 ANSWER 15 OF 19 BIOSIS COPYRIGHT 2004
 BIOLOGICAL ABSTRACTS INC. on STN
 ACCESSION NUMBER: 1996:39129 BIOSIS
 DOCUMENT NUMBER: PREV199698611264
 TITLE: Alternative procedures for
 reducing blood and blood
 component usage.
 AUTHOR(S): Healy, C.
 CORPORATE SOURCE: Hobart Pathol., 63
 Salamanca Place, Hobart, TAS 7000,
 Australia
 SOURCE: Australian Journal of
 Medical Science, (1995) Vol. 16, No.
 4, pp. 126-134.
 ISSN: 1038-1643.
 DOCUMENT TYPE: Article
 General Review;
 (Literature Review)
 LANGUAGE: English
 ENTRY DATE: Entered STN: 26 Jan 1996
 Last Updated on STN: 13
 Mar 1996

AB Blood transfusion is a therapy that is accompanied by inherent risks.

These risks are numerous and potentially serious. Adopting technologies

and strategies which minimize risk must be among the most important future developments in transfusion science.

This review covers the alternative procedures, including chemical and physical means, of avoiding or reducing blood and blood component usage. The relative merits of the use of erythropoietin, the colony stimulating factors, 1-deamino-8-D-

arginine vasopressin, epsilon amino caproic acid, aprotinin, tranexamic acid and the recombinant clotting factors are discussed. Also examined is the future role of gene therapy, the changing practices in surgical technique and a reduction of the transfusion trigger. The benefits which each alternative offers in different medical and surgical

situations, their use as a single therapy, in combination with or as adjuncts to other medical and surgical interventions are also discussed.

The application of these technologies and strategies to minimize exposure to donor blood products are currently being used. However, many of the new technologies need further evaluation through larger and more standardized studies to assess their efficacy and long term safety.

L9 ANSWER 16 OF 19 CAPLUS COPYRIGHT 2004
ACS on STN
ACCESSION NUMBER: 1993:578977 CAPLUS
DOCUMENT NUMBER: 119:178977
TITLE: Structure-function
analysis of the C-terminal segment
of human interleukin-

6
AUTHOR(S): Li, Xiaomao; Rock,
Fernando; Chong, Pele; Cockle,
Stephen; Keating,
Armand; Ziltener, Hermann; Klein,
Michel
CORPORATE SOURCE: Connaught Cent.
Biotechnol. Res., Willowdale, ON, M2R
3T4, Can.
SOURCE: Journal of Biological
Chemistry (1993), 268(30),
22377-84
CODEN: JBCHA3; ISSN:

0021-9258
DOCUMENT TYPE: Journal
LANGUAGE: English
AB It has been hypothesized that
interleukin-6 (IL-6) and ***granulocyte***
- ***colony*** - ***stimulating***
factor (***G*** -
CSF) may fold as 4-.alpha.-
helix bundle proteins. To probe the
functional role of the putative 4th
helical segment of IL-6 (D-helix), a
chimeric IL-6/ ***G*** - ***CSF***
analog contg. the

predicted D-helix of ***G*** -
CSF as well as a panel of IL-6
D-helix point mutants were analyzed for
their resp. secondary structure,
antigenicity, and receptor binding and
biol. activities. The putative
D-helix of IL-6 could not be replaced by
its ***G*** - ***CSF***

counterpart in spite of their high degree
of similarity and thus is
indispensable for the antigenic and
functional integrity of the IL-6
receptor binding site. Conversely, the
grafting of the ***G*** -

CSF D-helix did not confer any
G - ***CSF*** activity
to IL-6. A synthetic helical peptide
contg. the IL-6 D-helix was
inactive, even when mixed with or linked
to a peptide from the A-helix
known to be involved in the active site.
However, the conserved residues

F173, R179, and R182 found in the D-
helices of both IL-6 and ***G*** -
CSF critically contribute to
the architecture of the IL-6 active
site. Indeed, mutation of F173 or R179
markedly affected IL-6 receptor

binding and biol. activities, but not the
conformation of a major
neutralization epitope. Furthermore,
substitution of R182 resulted in a
significant unfolding of the D-helix
accompanied by a drastic loss in IL-6
antigenicity and functional activities.
Nevertheless, residues other than
F173, R179, and R182 also contribute to
IL-6 specificity.

L9 ANSWER 17 OF 19 MEDLINE on STN
ACCESSION NUMBER: 93328601 MEDLINE
DOCUMENT NUMBER: PubMed ID: 8335573
TITLE: Tumor necrosis factor-
alpha inhibits endothelium-dependent
relaxation.
AUTHOR: Greenberg S; Xie J; Wang
Y; Cai B; Kolls J; Nelson S; Hyman
A; Summer W R; Lippton H
CORPORATE SOURCE: Department of Medicine,
Louisiana State University Medical
Center, New Orleans 70112.
CONTRACT NUMBER: HL-11802 (NHLBI)
SOURCE: Journal of applied
physiology (Bethesda, Md. : 1985), (1993
May) 74 (5) 2394-403.
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ENTRY MONTH: 199308
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19980206

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AB Tumor necrosis factor-alpha (TNF-alpha)
stimulates nitric oxide (NO) in
vascular endothelium by induction of the
enzyme NO synthase II (NOS II).

We examined the effects of TNF-alpha on 1) endothelium-dependent (EDR) and endothelium-independent (EIR) relaxation and 2) contraction of bovine intralobar pulmonary arteries (BPA) and veins (BPV) in vitro.

Acetylcholine (ACh), bradykinin (BK), histamine, and A23187 produced EDR of BPA contracted with a 50% effective concentration of U-46619 (15 nM), because relaxation was abolished by endothelium-rubbing and attenuated by L-NG-mono-methylarginine (L-NMMA; 300 microm). TNF-alpha (0.00417, 0.0417, 0.417, and 1.25 micrograms/ml) incubated with BPA for 60 min inhibited EDR of the BPA to ACh, BK, and histamine. The effects of TNF required 30 min for onset. Recovery of EDR occurred 3-4 h after washout of TNF-alpha. Pentoxifylline (1 microm) did not affect ACh-induced EDR but selectively reversed TNF-alpha-mediated inhibition of ACh-induced EDR.

TNF-alpha-mediated inhibition of EDR was not reversible by L-NMMA, an inhibitor of NOS I and NOS II, the cyclooxygenase inhibitor ibuprofen, or CV-3908 (1 microm), a platelet-activating factor antagonist. The inhibitory effect of TNF-alpha on EDR was not mediated by nonspecific sensitization of the endothelium to human protein because recombinant human ***granulocyte*** ***colony*** - ***stimulating*** ***factor*** (10, 50, and 500 x 10(3) U/ml) did not affect EDR of BPA.

The effect of TNF-alpha was specific for release of NO from the endothelium of BPA because TNF-alpha did not affect 1) EDR of BPV to ACh, BK, or ATP; 2) EIR of BPA or BPV to nitroprusside; and 3) contraction of either BPA or BPV to KCl, U-46619, histamine, norepinephrine, or serotonin. Thus TNF-alpha appears to selectively inhibit receptor-mediated EDR and NO release in BPA. TNF-alpha-mediated inhibition of EDR differs from that of L-***arginine***-based inhibitors and may represent an endogenous physiological mechanism of regulation of NO in the endothelium.

L9 ANSWER 18 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1993:183893 CAPLUS
DOCUMENT NUMBER: 118:183893
TITLE: Platelet-activating factor secreted by DDAVP-treated

monocytes mediates von Willebrand factor release from endothelial cells

AUTHOR(S): Hashemi, S.; Palmer, D. S.; Aye, M. T.; Ganz, P. R.
CORPORATE SOURCE: Blood Transfus. Serv., Canadian Red Cross, Ottawa, ON, K1S 3E2, Can.

SOURCE: Journal of Cellular Physiology (1993), 154(3), 496-505
CODEN: JCLLAX; ISSN:

0021-9541

DOCUMENT TYPE: Journal
LANGUAGE: English

AB The authors have previously shown that although DDAVP (1-diamino-8-D-***arginine*** vasopressin), a synthetic ***analog*** of the natural hormone ***arginine*** vasopressin, does not directly promote release of von Willebrand factor (vWf) from human umbilical vein endothelial cells (ECs), enhanced release does occur when ECs were exposed to either monocytes or to supernatants recovered from DDAVP-treated monocytes. In the present study, exposure of monocytes to DDAVP did not increase secretion of interleukins (IL)-1.beta., IL-6, IL-8, tumor necrosis factor (TNF-.alpha.), growth factors ***G*** - ***CSF*** (granulocyte-), GM-CSF (granulocyte, monocyte-colony stimulating factor), prostaglandins (PG) E2, PGF2.alpha., or PGI2 or purine nucleotides such as ATP and ADP. However, increased levels of platelet-activating factor (PAF) were secreted by DDAVP-treated monocytes in a time- and dose-dependent manner that pos. correlated with the enhancement in vWf release from ECs. Moreover, this effect could also be elicited when lipid exts. of these supernatants or purified PAF were added directly to ECs. This response could be inhibited with (+.-)-trans-2,5-bis(3,4,5-trimethoxyphenyl)-1,3-dioxolane, a specific PAF receptor antagonist, when the ECs were exposed to supernatants from DDAVP-treated monocytes or to pure PAF. Thus, enhanced secretion of PAF from monocytes is one mechanism whereby DDAVP can provoke release of vWf from ECs.

L9 ANSWER 19 OF 19 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1988:217269 CAPLUS
DOCUMENT NUMBER: 108:217269
TITLE: High-yield expression of modified human

granulocyte ***colony*** - ***stimulating***

factor gene in yeast and Escherichia coli
INVENTOR(S): Cerretti, Douglas
Pat; Cosman, David John; Gillis, Stephen; Mochizuki, Diane Yukiko; March, Carl Jack; Price, Virginia Lee; Tushinski, Robert J.; Urdal, David Lloyd

PATENT ASSIGNEE(S): Immunex Corp., USA
SOURCE: Eur. Pat. Appl., 38
PP.

CODEN: EPXXDW
DOCUMENT TYPE: Patent

LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
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APPLICATION NO.	DATE		
EP 243153	A2	19871028	EP
1987-303509	19870422		
EP 243153	A3	19880113	
R: AT, BE, CH, DE, ES, FR, GB, GR,			
IT, LI, LU, NL, SE			
ZA 8702705	A	19871230	ZA
1987-2705	19870415		
DK 8702031	A	19871023	DK
1987-2031	19870421		
JP 63000299	A2	19880105	JP
1987-98465	19870421		
AU 8771844	A1	19871029	AU
1987-71844	19870422		
AU 601727	B2	19900920	
PRIORITY APPLN. INFO.:			US
1986-856643	19860422		
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1986-931458 19861114
AB Human ***granulocyte***
colony - ***stimulating***
factor (hG-CSF) derivs. are
recombinantly produced in high yields
in yeast and Escherichia coli hosts.
Plasmid pBC102.K22 was constructed
contg. a site-specifically mutagenized
hG-CSF gene (having the codon for
arginine at position 22
replaced with that for lysine such that a
KEX2 protease-sensitive site is
eliminated) linked at the 5'-end via a
KEX2 recognition site to an .alpha.-
factor leader sequence and a sequence
encoding an antigenic peptide capable of
cleavage by bovine enterokinase.
Yeast transformed with pBC102.K22 showed
5-fold higher expression than
yeast transformed with vector contg.
native hG-CSF protein gene.